

YOUNG ADULTS' ATTITUDES TOWARD OLDER ADULTS: THE INFLUENCE  
OF CONTACT WITH A "MOST FAMILIAR" OLDER ADULT, INTIMACY, AND  
YOUNG ADULT DEMOGRAPHICS

BY

MICHAEL J. MALEC

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Abstract of a Dissertation Presented to the Graduate School  
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By

Michael J. Malec

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The research area of attitudes toward older adults is becoming increasingly relevant. This is because of the prevalence of ageism and the approaching senescence of the U.S. "baby boom" generation.

In this study, the young adult/"most familiar" older adult relationship and its influence on a young adult's attitudes toward older adults in general (i.e., all individuals 65 years and older) is examined. In this study, 171 male and female college students between the ages of 18 and 35 completed a questionnaire assessing the quality of contact and quantity of contact in a young adult's relationship with a "most familiar." The young adult's attitudes toward the "most familiar" and his/her attitudes toward older adults in general, were also assessed using the 32-item Aging Semantic Differential (ASD). A second self-report instrument, the 17-item Miller Social Intimacy Scale, was used to assess the



degree of social intimacy experienced in the older adult relationship. Social intimacy is a specific type of intimacy which is described as being similar to friendship. Respondents were also asked to provide information regarding their age, race, gender, and any co-residency experience with older adults.

Regression analysis and t-test results ultimately revealed that social intimacy (one aspect of quality of contact) was a significant predictor of a person's attitudes toward a specific familiar older adult. Significance was also found in the association between social intimacy and attitudes toward the larger out-group, older adults in general. Results also indicated that quantity of contact and a young adult's race are significant in predicting attitudes toward older adults in general.

## CHAPTER 1 INTRODUCTION

For the first time in history the U.S. is becoming a society of older adults consisting of many who are age 65 years or older (Aday, Sims, & McDuffie; 1996). In fact, demographic projections indicate that by the year 2030 this segment of the U.S. population will double. Included among the estimated 79 million older adults then will be 8.5 million "oldest-old" Americans (Administration on Aging, 1996). These individuals, age 85 years or older, are the most rapidly growing segment of the U.S. population (Hooyman & Kiyak, 1999). This trend is expected to continue well into the first half of this century.

Along with growth and aging of the population, dramatic changes in the old-age dependency ratio are also projected. Arithmetically, this is the ratio of individuals in a population generally considered too old to work (i.e., those age 65 years or older) to the population of working age individuals age 18 through 65 (Kart, 1997). It is this latter cohort group--especially those in their middle adult years--who typically serve as primary supporters and caregivers of society's frail and elderly.

By the year 2030, for example, the old-age dependency ratio is expected to be 1:3 (Kart, 1997). Hypothetically, this means that each older individual will have, on the average, only three working age individuals available to provide him/her the political, social (e.g., caregiving), and economical support he/she will

need. In contrast, today's ratio in the U.S. is about 1:5, and was 1:11 in 1930 (Kart, 1997). Thus, in 1930 there were eleven working age adults supporting each older individual. Clearly, if this pattern continues as projected, proportionately fewer U.S. caregivers will be available by mid-century to provide the support and services required by the oldest segment of the population at that time. According to Laditka and Laditka (2001) future increases in support and caregiving by family members will be needed to replace lagging public support.

Because of these changes and trends in aging, the intergroup contact area of attitudes toward older adults is becoming an increasingly relevant area of social science concern (Benedict, 1999; Newman, Faux, & Larimer, 1997). Intergroup contact involves the actual face-to-face interaction that occurs between respective members of clearly distinguishable and well-defined groups such as the young and the old (Pettigrew & Tropp, 2000). In addition, the social problem, ageism--the negative stereotyping and systematic devaluation of people based solely on their age (McGowan, 1996)--is becoming more relevant in the U.S. (Vasil & Wass, 1993). Both, in part, are occurring because of the approaching senescence of a sizable baby boom generation born between the years 1946 and 1964. Consequently, the promotion of attitude change among age groups holding negative attitudes toward older adults is warranted (Angiullo, Whitbourne, & Powers, 1996; Benedict, 1999; Newman et al., 1997).

While studies have examined the attitudes toward older adults of individuals at various stages of life, most research has been conducted on younger, college-aged adults (Benedict, 1999). Findings in this area, as reported in the literature, have been mixed (Braithewaite, Lynd-Stevenson, & Pigram,

1993; Knox, Gekoski, & Johnson, 1986) and relatively little research has been conducted using middle-aged adults (i.e., ages 30 to 55 years) as subjects. Ironically, however, it is from this latter age group that the majority of today's primary caregivers of the elderly typically come (National Alliance for Caregiving & The American Association of Retired Persons [AARP], 1997). In essence, it is during the early-to-middle adulthood stage of life that nurturance and the caretaking of older family members become most significant (Carter & McGoldrick, 1999). In fact, data from a 1997 national survey indicate that (a) the average age of U.S. caregivers is 46, and (b) nearly 40% of all U.S. caregivers fall within the 35 to 49 age range (National Alliance for Caregiving & AARP, 1997).

Research indicating that today's young adults sometimes are unwilling to interact with older adults (Nussbaum, Pecchioni, Robinson, & Thompson, 2000) also suggests that there is a need for the promotion of attitude change among young adults. Contemporary research findings indicate that contact with older adults and individual willingness to work with them is directly related to each other (Gorelik, Damron-Rodriguez, Funderburk, & Solomon, 2000; Kane, 1999). Subsequently there are concerns whether today's young adults in the future will willingly take on the role of caregiver if current ageist attitudes--negative stereotyping, prejudice, and discrimination--persist (Berenbaum, 2000; Hawkins, 1996; Kane, 1999; Laditka & Laditka, 2001; Nussbaum et al., 2000; Shoemaker & Rowland, 1993). Also adding to these concerns is data indicating that a shortage of helping professionals (e.g., geriatric physicians, social workers, nurses) interested in working with the elderly may continue to develop (Berenbaum,

2000; Gorelik et al., 2000; Robert & Mosher-Ashley, 2000). Previous research, according to Edwards and Aldous (1996), indicates that there is already minimal interest in general among health care and medical professionals in working with the elderly.

### Theoretical Framework

The theoretical framework underlying this study includes research and theory in several areas: (a) intergroup relationship development (e.g., how cognitive schemas and thinking which comprise intergroup prejudice and stereotypes develop), (b) the reduction of negative attitudes and thinking which exist between opposing out-groups such as young adults and older adults, (c) the role of contact, or interpersonal interaction, in improving intergroup relations and reducing ageism, and (d) the influence of factors such as socialization (e.g., gender role differences, parental influence), culture (e.g., race differences), and experience (e.g., residing with an older adult) on intergroup attitudes and relations.

The study is based primarily on three broad theoretical perspectives. The first, *social identity theory* (SIT) (Tajfel, 1978, 1982; Tajfel & Turner, 1979; Turner, 1975, 1985), accounts for the cognitive formation of racial, gender, aging, and other intergroup prejudice and stereotyped thinking (Hale, 1998; Hogg, 1987; Sachdev & Bourhis, 1987). In effect it emphasizes the cognitive processes of social categorization, social comparison, and social competition and their role in intergroup relations. The second, *the contact hypothesis* (Allport, 1954; Amir, 1969, 1976, 1994; Pettigrew, 1998; Stephan & Stephan, 1996, 2001), proposes that interpersonal contact will lead to improved relations between groups as long

as certain favorable or facilitative conditions of contact are met or fulfilled. A third theoretical perspective, *symbolic interactionism* (Blumer, 1937, 1969; Burr, Leigh, Day & Constantine, 1979; Manis & Melzer, 1978; Rose, 1962), explains the influence of factors such as socialization, role expectation, and experience in intergroup attitude formation.

### Social Identity Theory (SIT)

In general, SIT, as conceptualized by Tajfel (1978) and Turner (1975, 1985), represents the integration of two perspectives in the study of intergroup relations: (a) social categorization as exemplified in the early works of Doise (1978), Tajfel (1969), and Wilder (1986), and (b) social comparison as represented in the research of Lemaine (1974) and Vanneman and Pettigrew (1972). Laboratory studies conducted by Tajfel and others (Tajfel, 1982; Tajfel, Billig, Bundy, & Flament, 1971; Tajfel & Turner, 1979) have also been important. These studies reveal that even arbitrary categorization of individuals into different groups is sufficient to promote intergroup discrimination. Succeeding studies in the area further substantiate these findings (Hogg & Turner, 1987; Messick & Mackie, 1989; Tajfel, 1982; Turner & Giles, 1981; Turner, Hogg, Oakes, Reicher, & Wetherall, 1987). SIT has significantly added to the knowledge about group influence on behavior (Brewer & Brown, 1998; Puddifoot, 1997), and, in general, is widely-accepted throughout the field (Brewer & Brown, 1998; Fiske, 1998). As such, it continues to be recognized for its basic concepts and ideas on the role of social categorization and social identities in intergroup relations (Tajfel, 1978, 1982; Turner & Reynolds, 2001).

At its core, SIT proposes that intergroup attitudes, prejudice, and stereotyping are the direct result of individuals' cognitive tendencies to (a) socially categorize others in the world, and (b) socially compare themselves to others. As a result of these processes, social competition between groups is created. These cognitive behaviors, according to SIT, are motivated in part by the needs of individuals to maintain positive social identity, self-identity, and self-esteem. Social identity, in this context, is defined as that component of an individual's self-concept which develops as a result of knowledge of their own membership in a social group, and the emotional significance and value such an affiliation holds for them (Tajfel, 1982).

In effect, SIT provides a theoretical framework from which all social situations involving a specific in-group and out-group categorization can be conceptualized. Ultimately, SIT proposes the existence of a general intergroup schema comprised of three basic components: (a) assimilation within and contrast between categories or groups (i.e., the intergroup accentuation principle), (b) affection and favoritism expressed primarily toward persons perceived as fellow in-group members (i.e., the in-group favoritism principle), and (c) social competition between groups as a result of social comparison and mutual perceptions of negative intergroup interdependence (i.e., the social competition principle) (Brewer & Gaertner, 2001).

### The Contact Hypothesis

The contact hypothesis, as formulated by Allport (1954), is the original and most classic version of contact theory (Stephan & Stephan, 2001). As such, it is a theoretical perspective associated with the study and role of contact in

intergroup relations. Unlike social identity theory, which explains how and why negative intergroup attitudes develop, the contact hypothesis, and contact theory in general, focuses on the understanding of intergroup contact and its influence on attitudes and relations. In essence, the contact hypothesis only attempts to predict when contact leads to positive attitude change (Pettigrew, 1998).

Based initially on evidence from early field studies on race relations and optimal contact (Brophy, 1946; Deutsch & Collins, 1951; Kephart, 1957; Sherif, Harvey, White, Hood, & Sherif, 1961; Sims & Patrick, 1936; and Wilner, Walkley, & Cook, 1955), the contact hypothesis has over time proven to be an influential, durable, and empirically well-supported paradigm (Connolly, 2000; Dixon, 2001; Pettigrew, 1998; Pettigrew & Tropp, 2000).

One early classic study which focuses on the area of optimal contact and its effect on intergroup relations is the 1954 Robbers Cave experiment (Sherif et al., 1961). Results from this field experiment conducted at a boys' summer camp show that situations characterized by cooperation and mutual intergroup goals can lead to less in-group bias and more intergroup friendliness. Initially, Sherif and his colleagues purposely separated two experimental groups of eleven boys from each other. This was done so that each group would have time to develop its own sense of group identity before having any contact with the other group. Next, the groups were brought together by the research team to participate against each other in group-oriented competitive situations and activities (e.g., tug-of-war, football). These activities were specifically designed to instigate some intergroup hostility (e.g., name calling and occasional fighting) between the two groups. Subsequently, while intergroup contact in neutral, non-competitive



situations did not seem to calm the intergroup hostility which had been developed, the introduction by the research team of a series of superordinate goals whose successful completion required the cooperation of both groups' members working in unison, did. Ultimately, this study has provided other researchers with a prototype laboratory paradigm, which has been used in later experiments on the effects of intergroup contact and its moderating conditions (Brewer & Gaertner, 2001).

Today contact theory remains a guiding framework in the development of intergroup prejudice and conflict-reducing strategies (Dovidio, Kawakami, & Gaertner, 2000). This in part is due to Caspi (1984), who in a landmark study first established the link between the contact hypothesis and ageism. In his study, he compared attitudes toward the elderly of children attending an age-integrated school against those attending a traditional school. He found that children who had daily contact with older adult teachers' aides reported significantly more positive attitudes toward older adults than did children having little or no contact. Those having less or no contact with older adults reported attitudes which were vague and indifferent.

At its core, the contact hypothesis (and contact theory in general) posits that regular interaction between individuals from different out-groups can create positive intergroup attitudes and reduce existing prejudice and stereotyping as long as other favorable or facilitative conditions of contact are also met. Underlying this is the assumption that intergroup hostility is natural, pre-existing, and unavoidable initially (Brewer & Gaertner, 2001). Pre-existing hostility, accordingly, is believed to be caused by the separation and the lack of familiarity,

which naturally occurs between all groups initially. If left unaffected, the underlying hostility will manifest itself in the form of negative attitudes, intergroup prejudice, and stereotyping common between groups.

Prior to Allport's work, studies in the field predominantly had been guided by an understanding that increased contact alone could sufficiently reduce intergroup hostility and its manifestations. Allport challenged this assumption, however. In formulating the contact hypothesis he proposed that contact (a) by itself is insufficient in stimulating positive intergroup attitude change and (b) under certain situations can even have a negative effect on existing intergroup attitudes and relations. In doing so, he also identified four contact situation-related conditions which must be met or fulfilled if intergroup attitudes and relations are to become more positive. The four conditions are (a) equal status between the participants in a contact situation, (b) the sharing of common goals, (c) the absence of competition, and (d) the positive sanctioning by authorities of the participants' interaction (Pettigrew, 1998).

Since Allport's work, other theorists building on his concepts have proposed other contact-related factors believed to be significant in the formation of more positive intergroup relations and attitudes. Some focus has been directed toward the related areas of acquaintance potential (Cook, 1962) and the effects of quality versus quantity of contact (Allport, 1954; Caspi, 1984; Schwartz & Simmons, 2001; Sigelman & Welch, 1993; Wittig & Grant-Thompson, 1998) on intergroup attitudes. Cook (1962), for example, has identified what he characterizes as a fifth necessary facilitating condition of successful intergroup contact: acquaintance potential (e.g., the potential for intimacy). Cook, along

with Allport, have identified intergroup interaction frequency, duration, and closeness as being key determinants of whether a relationship becomes meaningful. Others, building on the works of Allport and Cook, have proposed other acquaintance potential-related factors of significance. Included are intergroup friendship (Pettigrew, 1998), the potential for friendship across groups (Stephan, 1999; Wittig & Grant-Thompson, 1998), and contact favorability (Schwartz & Simmons, 2001).

Intimacy (Amir, 1976), another highly-recognized condition related to quality and quantity of contact, also has been a focus of contact theorists. In fact, Allport (1954), in his early works, also was a leader in stressing the significance of the role played by intimacy and the opportunity for a one-on-one interpersonal interaction in intergroup relations and attitude formation. He argued specifically that it is intimate contact, not trivial contact, that is of greatest significance in attitude formation. Amir (1976) in agreement has suggested that intimacy, in contrast to superficial contact, is a significant factor in intergroup attitudes and relations. He proposes that without intimacy existing negative attitudes (a) will not change, or (b) will become further reinforced.

In general, two reasons have been given explaining why acquaintance potential-related factors such as intimacy may be important in the intergroup contact process (Brewer & Gaertner, 2001). First, a reasonably intimate interpersonal relationship, in general, is considered positive, satisfying, and rewarding to those involved. Therefore, it is anticipated that positive effects generated by such a relationship subsequently will be carried over and generalized to the larger group as a whole (Cook, 1962). Second, intimate

personalized relationships, in contrast to brief superficial ones, allow greater opportunity to acquire more accurate information about each other. Inaccurate stereotypes of others can more readily be disconfirmed (Rothbart & John, 1985).

The streamlining of contact theory has also been a focus of theorists and researchers in recent times. This, in part, has been motivated by perceptions that contact theory is overly complex and not as useful a paradigm as it once was (Stephan & Stephan, 1996, 2001). In response, Stephan and Stephan (2001) formulated their own revised model which simplifies contact theory. With this model, four broad categories of factors or predictors influencing intergroup attitudes and relations are identified: (a) situational, (b) person, (c) societal, and (d) mediating factors. According to the Stephans, it is from these four major categories that all individual factors significantly influencing intergroup attitudes and relations originate.

### Symbolic Interactionism

According to symbolic interactionism (Blumer, 1937, 1969; Burr et al., 1979; Manis & Melzer, 1978; Rose, 1962), humans live in a symbolic world in which the meanings of objects and actions are determined through their interaction with others (Blumer, 1969). Inevitably, through the process of interpreting symbols and creating meaning, individuals define their identities, rights, obligations, and other aspects of relationship toward others (Macionis, 2001). Socialization, culture, and personal development are all considered major influences in this process (Mutran & Reitzes, 1984; Tanksley, 1995).

According to this theoretical paradigm, attitudes develop as a result of the learned meanings, values, sentiments, and knowledge that an individual obtains

through interactions with individuals, society, and the world (e.g., family, peers, media). Specifically, attitudes toward aging and older adults develop as a result of several factors. Included are (a) personal experiences (e.g., co-residency with an older adult), (b) socioeconomics (e.g., education level, socioeconomic status), (c) socialization (e.g., learned gender and race roles), (d) family and religious values, and (e) historical stereotypes (Zandi, Mirle, & Jarvis, 1990).

Young women, for example, learn at an early age that females take care of their families (Tanksley, 1995). Accordingly, Colley and Eddy (1988), in a survey of college students, found that females reported having significantly higher interaction rates with older adults than did males. While gender is also found to be a significant factor in studies by Benedict (1999) and Hawkins (1996), other studies show it to be insignificant (Sanders & Pittman, 1988).

According to theory, attitudes are learned from those in society with whom individuals interact (e.g., family, peers, teachers, and media). Ultimately, the way an individual thinks, feels, and acts is influenced by race/ethnicity and cultural roots (Hines, Preto, McGoldrick, Almeida, & Weltman, 1992). In support of this, research has shown (Hines et al., 1992), for example, that African-Americans display respect and have more positive attitudes toward aging and older adults than do whites.

Symbolic interactionism also maintains that the self is a social construct and an object whose meaning is socially based (Quadagno & Street, 1996). In line with this are research findings indicating that children do not always develop attitudes favoring their own in-group (Bigler, Brown, & Markell, 2001). Although boys generally develop attitudes favoring males, girls typically are more

egalitarian (Signorella, Bigler, & Liben, 1993). Similarly, in children who are as young as age three and exhibiting prejudice, it is suggested that their prejudice is not an outgrowth of cognitive development or categorization. Instead, it is viewed as being a function of children's specific social and structural circumstances (Cameron, Alvarez, Ruble, & Fuligni, 2001).

### Scope of Problem

Intergroup attitudes strongly influence the development of ageism, the systematic stereotyping, prejudice, and discrimination against people because they are old (Butler, 1989). Just as a person of a particular skin color, perceived as being from the out-group, becomes the target of racism, or a female the target of sexism, a person differing in age or generation may similarly become the target of ageism. Although it applies to attitudes toward the young also, research on ageism has predominantly been directed toward older adults age 65 or older (Williams & Giles, 1998).

While ageism is similar to racism and sexism, it is also a unique social problem and distinct form of discrimination. In the case of ageism, all individuals must anticipate eventually moving into old age and the older adult out-group. Unlike other types of discrimination, age discrimination is propagated by individuals who someday will be old themselves (McGowan, 1996). These individuals may also be the victims of ageism one day. Ageism also cuts across all traditional classifications of society--race, gender, religion, and ethnicity--that other forms of discrimination do not (Kelchner, 1999). Consequently, Ng (1998), has characterized ageism as the least understood of the major *isms*. He also

suggests that ageism may be the most relevant in terms of its potential effects on key societal functions, such as policy making and research funding, in the future.

Ageism, identified as "the ultimate prejudice" and "cruellest of rejections" (Palmore, 1999, p. 3), takes a negative toll on older adults, younger people, and society as a whole. For older adults, ageism often results in losses in self-esteem, respect, socialization, happiness, and general well being (Kelchner, 1999; Kupetz, 1994; Sheffield, Carey, Patenaude, & Lambert, 1995). In addition, ageism has been identified as a contributor to elder abuse and neglect. According to a U.S. House of Representatives Select Committee on Aging, more than 1.5 million older Americans annually are affected by these two (Mills, Vermette, & Malley-Morrison, 1998). In fact, ageism's economic toll on the U.S. economy is estimated to be as much as \$277 billion annually (Palmore, 1999). Finally, in regards to its prevalence, research indicates that ageism exists among (a) children as young age four (Blunk & Williams, 1997), (b) those who work with or for older adults, and (c) older adults themselves (Ferraro, 1998).

Within the literature, ageism has been referred to as an attitude, stereotype, prejudice, and belief. It also is considered to be the result of common psychological, biological, and socially-based myths held by society about older adults and the aging process. Biological myths, according to Harrigan and Farmer (1992), pertain to physical changes associated with the process of aging. These include myths about older adults' health/illness, unattractiveness, and sexuality. Myths about psychological aging also exist about older adults' suspected rigidity, senility, declining memory, ability to learn, dependency, and loss of sexual interest. Finally, myths about social functioning are associated

with aging. Older adults are often thought to be socially withdrawn, alienated, and unable to use their leisure time effectively.

There are a number of methodological issues in the study of ageism, specifically in the areas of intimacy and contact. Despite the theoretical emphasis placed on intimacy regarding intergroup relations (Aday, Aday, Arnold, & Bendix, 1996; Amir, 1994; Brussoni & Boon, 1998; Fresko, 1997; Meshel, 1997; Seefeldt, 1987; Stephan & Stephan, 1996), research has often tended to focus instead on the relationship of other intimacy-related factors such as closeness to intergroup attitudes. Reis and Patrick (1996) assert that the terms intimacy and closeness are not interchangeable and should instead be recognized as distinct constructs. They argue that while closeness consists of high levels of contact and behavioral interdependence, intimacy consists of mutual understanding, caring, and validation also.

A second problem with the research is that contact often has been defined in overly simplistic terms (Knox et al., 1986). In the past the frequency of interactions with older adults, or the quantity of contact, has at times been construed as a sufficient measure of one's overall level of contact. Frequently measures of relationship quality of contact have been ignored or minimized in early studies. Clearly, while quantity of contact, or the frequency of one's interactions with older adults, has been considered by some researchers a sufficient measure of contact (Brubaker & Powers, 1976), others suggest that quality of contact is at least an equally important factor (Boon & Brussoni, 1996; Knox et al., 1986; Schwartz & Simmons, 2001).



Reviewers also have criticized general attitude research for being methodologically crude and sloppy at times. Criticism, in part, has been directed toward some of the questionable methods and the uncertain psychometric qualities of the instruments used (Angiullo et al., 1996; Connolly, 2000; Kite & Johnson, 1988; Knox et al., 1986; Kraus, 1995; MacNeil, Ramos, and Magafas, 1996).

### Need for the Study

Thorslund and Parker (1995), identifying strategies for an aging society, found that the number of older adults needing support and care has risen in past years and will continue rising well into the current century. Because of this, it is expected that the U.S. government, in preparing for this change by mid-century, will place much of the burden of care for frail older adults back onto the family. This, suggest Thorslund and Parker, is a potential problem because of forecasts indicating that (a) family sizes will continue to decrease, and (b) the number of women employed outside the home will continue to grow. The latter is significant because within the U.S. it is middle-aged females who typically have filled the caregiver role. In short, by mid-century it is expected that substantially more aged and frail individuals in the U.S. will require care. It is also expected that substantially fewer individuals will be available to provide it. Because of this, and the prevalence of ageism, studies like the current one clearly are needed.

This study is important foremost because of the information it contributes to the understanding of ageism and relationships between the aged and other populations. Studies like this, which investigate intergenerational contact and intimacy complement the caregiving research. As a result, social scientists and

educators will have a more comprehensive picture of helping relationships in general, and caregiving, specifically.

With greater knowledge about predictors of attitudes toward older adults, future educators and social gerontologists should be better prepared to identify, and provide interventions, to individuals or larger segments of the population whom it has been empirically shown are at greatest risk for ageist thinking, stereotyping, discrimination (e.g., employment discrimination), and elder abuse.

Added knowledge will also assist social scientists and educators in their continued development of intergenerational programs. Their purpose is to bring older individuals into contact with individuals of other generations; even young children. Current programs continue to be tested and utilized in public school classrooms, colleges and universities, and other settings (Angiullo et al., 1996; Barton, 1999; Vernon, 1999; Pinquart, Wenzel & Sorensen, 2000). These programs have been designed specifically with the goal of decreasing ageist thinking and intergroup stereotyping, prejudice, and discrimination, but have fallen short in this respect, at times. Their need, however, is highlighted by the fact that ageist thinking and behavior can be found even among Americans as young as age four (Blunk & Williams, 1997).

According to Weaver (1999), fundamental challenges facing institutions of higher education this century include the educating of (a) the general public about the myths and realities of aging in order to reduce ageism, and (b) both paraprofessional and non-professional health and service providers. The latter will have responsibilities for the formal medical and caregiving needs of older adults today and in the future. On this basis, the knowledge gained from this

study should also benefit university and college educational programs in medicine and gerontology. This is especially important since projections indicate that some of today's students, once graduated and in the prime of their professional careers, will spend as much as 75% of their total practice time working with older adults (Shoemaker & Rowland, 1993).

### Purpose

The purpose of this study is to examine the association between seven person or situation-related variables of intergroup contact and young adults' (i.e., all individuals ages 18 of and 35) attitudes toward older adults. Variables to be studied include (a) the young adult's attitudes toward the individual identified by him/her as being the "most familiar" older adult in their life, (b) the reported relationship intimacy with the "most familiar" older adult, (c) the quantity of contact between the two, and the young adult's (d) gender, (e) race, (f) age, and (g) amount of time spent co-residing with an older adult. Also of importance in this study is the question of whether a young adult's relationship with a "most familiar" older adult influences their attitudes toward older adults in general.

Among the variables to be examined are two situation-related variables: (a) social intimacy and (b) quantity of contact (i.e., contact frequency in this study). Also examined are four person-related variables: (c) a young adult's gender, (d) race, (e) age, and (f) time spent co-residing with an older adult age 65 years or older. While situation factors pertain to characteristics of the contact situation itself, person factors pertain to the demographics, characteristics, and experiences of the individuals who themselves are involved in the contact

situation. Research, thus far, supports the relationship of both categories of variables to intergroup attitudes (Stephan & Stephan, 2001).

The sample for this study will consist of young adults (i.e., individuals between the ages of 18 and 35 years) who are enrolled in either a four-year university or community college in the Jacksonville, Florida, area.

### Research Questions

The questions to be researched in this study are:

1. What is the relationship between a young adult's attitudes toward a "most familiar" older adult and their attitudes toward older adults in general?
2. What is the relationship between the quantity of contact (i.e., frequency of contact) experienced by a young adult in their relationship with the "most familiar" older adult and his/her attitudes toward older adults in general?
3. What is the relationship between social intimacy experienced by a young adult in their relationship with a "most familiar" older adult and his/her attitudes toward older adults in general?
4. What is the relationship between a young adult's gender and his/her attitudes toward older adults in general?
5. What is the relationship between a young adult's race and his/her attitudes toward older adults in general?
6. What is the relationship between a young adult's age and his/her attitudes toward older adults in general?
7. What is the relationship between the amount of time a young adult has spent co-residing in the same household with an older adult (i.e., age 65 or older) and his/her attitudes toward older adults in general?
8. What is the relationship between the level of intimacy experienced by a young adult in his/her relationship with the "most familiar" older adult in life and his/her attitudes toward a "most familiar" older adult?
9. What is the relationship between the combination of intimacy (i.e., an aspect of quality of contact) and frequency of contact (i.e., an aspect of quantity of contact) occurring in a young adult's relationship with the "most familiar" older adult and his/her attitudes toward that older adult?

### Definition of Terms

Acquaintance potential - Defined by Cook (1962), it is a general label used to express the opportunity inherent in a contact situation for members of one group to get better acquainted with members of the other group (Amir, 1994).

Ageism - Term coined in 1969 by the first director of the National Institute on Aging, Robert Butler, it is a form of age-based bigotry, which is similar to racism and sexism. In defining ageism, Butler has described it as "a process of systematic stereotyping and discrimination against people because they are old" (1995, p. 35).

Contact theory - Term used to describe the concepts and ideas proposed in the original contact hypothesis (Allport, 1954) and its subsequent theoretical revisions, updates, variations, and reconceptualizations (Stephan, 1999; Stephan & Stephan, 2001).

Closeness - Relationship dimension characterized by high levels of contact and behavioral interdependence (Reis & Patrick, 1996).

Decategorization - Model of intergroup contact and categorization proposing that contact is most effective in improving intergroup attitudes when interactions are one-to-one and interpersonal in nature, not group-to-group.

In-group - Collection of individuals perceiving each other as having something in common, or similar. In general they may feel that they belong together because of their mutual sharing of fate, family lineage, gender, age, language, geographical origin, ethnicity, religious affiliation, social class, occupation, attitudes, beliefs, norms, role definition, values, or other dimensions of themselves (Triandis & Trafimow, 2001).

In-group bias - Term which describes thinking in which favoritism in the evaluation and treatment of others is typically reserved for those individuals who are perceived as being similar to oneself (Tajfel, 1978, 1982).

Intergroup contact - This is any actual face-to-face interaction occurring between respective members of clearly distinguishable and well-defined groups (Pettigrew & Tropp, 2000).

Intergroup relations - Refers to the patterns of relationships that develop between groups (Borgatta & Borgatta, 2000).

Intimacy - This is a relationship dimension characterized by positive, interdependent, and ego-involving relations between individuals (Amir, 1994). In general, intimacy involves a sharing of personal feelings and information between individuals and includes the mutual perception of validation, understanding, and being cared about (Reis & Patrick, 1996).

"Most familiar" older adult - The individual age 65 years or older whom one identifies as being the one older adult in their life whom they have, or have had, the closest bond (Boon & Brussoni, 1996) with based on the combination of time shared with the person and emotional depth they experience in the relationship.

Older adult - Term typically used to describe all persons age 65 years or older in chronological age (Hooyman & Kiyak, 1999).

Old-age dependency ratio - This is the ratio of individuals in a population too old to work (i.e., persons 65 years or older) to the population of working age individuals between the ages of 18 and 64 (Kart, 1997).

Out-group - Set of people perceived as outsiders and therefore dissimilar to oneself or one's group. In-group members likely will refer to out-group members as *them*, and fellow in-group members as *us* (Triandis & Trafimow, 2001).

Person factors - A category of contact-situation related factors, which affect intergroup relations and the reduction of intergroup prejudice and stereotyping. Included in this group are factors related to the intergroup contact situation participants themselves (Stephan & Stephan, 2001).

Recategorization - A model of intergroup contact and categorization, it is also known as the common in-group identity model (Gaertner et al., 1993). According to this model, contact is most effective when it promotes a common in-group identity (e.g., "we are all Americans regardless of our religion") (Dixon, 2001).

Situational factors - Associated with contact theory, this group of factors is related to the intergroup contact situation itself (Stephan & Stephan, 2001).

Social categorization - Component of social identity theory consisting of an individuals cognitive assigning of others into social groups on the basis of factors such as skin color, gender, style of clothing, speech, age group or other factors or indications of group membership.

Social comparison - Component of social identity theory concerned with the tendency of individuals to discriminately compare others to themselves and the social groups to which they belong.

Social competition - Common intergroup milieu that is characterized by competition, tension, and distrust between groups and their respective members. This component of social identity theory ultimately develops from the processes of social categorization and social comparison.

Social identity - Term referring to the conceptualizations of the self that derive from one's own membership in emotionally significant social categories or groups (Tajfel & Turner, 1986).

Social intimacy - One of seven different types of relationship intimacy identified by Schaefer and Olson (1981) along with sexual, recreational, emotional, spiritual, aesthetic, and intellectual intimacy. It is conceptualized as a relationship process involving the experience of having common friends and social networks.

Societal factors - A category of contact situation-related factors that affect intergroup attitudes and relations (e.g., reducing intergroup prejudice and stereotyping). This group of factors is related to the societal context within which the contact takes place (Stephan & Stephan, 2001).

Subcategorization - A model of intergroup contact and categorization involving the mutual differentiation of individuals. In contrast to other models, it holds that contact is most effective in reducing intergroup prejudice and stereotyping when it is group-to-group contact that is emphasized (Hewstone & Brown, 1986).

### Organization of the Study

This study consists of five chapters. Chapter 1 introduces the scope of the problem, the theoretical framework underlying the study and associated main concepts, the need or rationale for conducting the study, the purpose, the related research questions, the definition of terms, and organization of the study. Chapter 2 is a review of the most pertinent related literature.

Chapter 3 describes in detail the research methodology and design of the study. Included in this chapter is a description of the population, the



instrumentation used, the sampling procedures, the data collection procedures, and the data analysis.

Data analysis and results are provided in Chapter 4. Included in this section also are a description of the sample and study variables, the hypothesis testing results, and an identification of the other relevant findings and results from the study.

Finally, in Chapter 5, the findings and results are discussed. This chapter also includes a discussion about the practical and theoretical implications of the results and findings, as well as a study limitations section, and recommendations for future research in the area.

## CHAPTER 2 REVIEW OF RELATED LITERATURE

This review is divided into several sections addressing the current information and research pertaining to attitudes toward older adults and (a) attitudes, stereotypes and beliefs, in general, (b) intergroup contact outside the context of age, (c) assessment issues in the attitude research, (d) cross-age contact and attitudes, (e) cross-age quantity of contact versus quality of contact, (f) relationship intimacy and friendship, (g) contact with "representative" versus "familiar" older adults, (h) the generalization of attitudes from target individual to the out-group in general, (i) the effects of living with an older adult, (j) the effects of a perceiver's race, (k) the effects of a perceiver's gender, and (l) the effects of a perceiver's age on attitudes.

### Attitudes, Stereotypes, and Beliefs

The value and roles of specific social groups, including older adults age 65 years and older, are largely determined by the attitudes (e.g., prejudice), beliefs, and stereotypes held by others in society (Benedict, 1999). In this regards, attitudes, beliefs, and stereotypes about older adults and aging are socially and culturally embedded (Zandi, et al., 1990). Each ultimately has a profound effect on how individuals perceive themselves and others in terms of the dimension, age. In regards to the prevalent social problem of ageism, Maddox (1995) suggests that it is particularly important to make distinctions between attitudes and other related constructs so that research in this area is not misleading.

Attitudes, as addressed in the literature, have been described as being either feelings or evaluations (Eagly & Chaiken, 1993); cognitions (Kruglanski, 1989); affect (Breckler, 1984; Breckler & Wiggins, 1989); or a combination of affective (evaluative), cognitive (beliefs), and conative (behavioral) components (Secord & Backman, 1964). Historically, however, two primary models have been employed in the research on attitudes toward older adults: *the tripartite model* and *unidimensional model* (Meshel, 1997). The tripartite model (McGuire, 1985)-- a three component model of attitudes and attitude change--characterizes attitudes as consisting of separate and discrete affective, cognitive, and conative components. Unfortunately, while some have endorsed this model (Massino, 1993; Zandi et al., 1990) measurement of the separate components for research purposes has proven difficult (Massino, 1993).

The unidimensional model (Fishbein & Ajzen, 1975) in contrast, regards affect, cognition, and behavior as distinct antecedents or consequences of an attitude, not components of it. In this regard, the unidimensional model is viewed as being more parsimonious than its counterpart, the tripartite model (Palmore, 1990). As defined by the unidimensional model, attitudes are overall evaluative summary responses (Ajzen, 1985; Cacioppo, Petty, & Geen, 1989). They are favorable or unfavorable dispositions one forms toward social stimuli such as people, objects, and ideas (Maddox, 1995). Attitudes are not based on arbitrary thought processes or feelings. Instead, in order to manage the large amounts of information received, humans develop schemas and categories for interpreting people, objects, and situations. On this basis, the attitude one holds toward any social stimuli reflects their social, political, and economic world as well

(Nussbaum et al., 2000). Thus, in accordance with the unidimensional framework, while attitude guides behavior, behavior can also be predicted by understanding the attitudes underlying it.

Beliefs, according to this framework, also contribute to attitude formation. In essence, beliefs function as the "information base" in the formation of attitudes (Fishbein & Ajzen, 1975, p. 14). For each schema or social category an individual creates, they also develop sets of beliefs, values, and attitudes. Therefore, attitudes are formed on the basis of sets of beliefs about a specific attitude object or stimulus, not just one belief (Meshel, 1997).

Stereotypes, in comparison to attitudes and beliefs, are composites of beliefs about social objects or stimuli. They contribute indirectly to the formation of intergroup attitudes and antecedent behaviors (Knox, Gegoski, & Kelly, 1995). Whereas the essence of an attitude is its evaluative aspect, a stereotype instead consists of cognitive images, beliefs, and expectations (Oskamp, 2000). Despite their cognitive basis, stereotypes often are non-factual and mythical, however (Vernon, 1999). Commonly held stereotypes about old age (e.g., older adults are unproductive and frail), often involve mythical negative beliefs and expectations about the personal attributes, feelings, and behaviors of older adults in general. Thus, by definition, age stereotypes are determined solely on the basis of a target individual's age. In effect, age stereotypes help individuals *fill in the picture*--though often inaccurately--about who, or what, an older individual or social group is (Maddox, 1995). While stereotypes, often inaccurately inform us about what a group or its members are like, prejudice (i.e., a negative attitude)

indicates how we likely will feel about the individual or group instead (Neuberg, 1994).

In summary, attitudes (e.g., negative prejudice), as characterized in the unidimensional model, are distinct and distinguishable on the basis of their evaluative nature from other related constructs such as beliefs and stereotypes. Because the unidimensional model is a more parsimonious (Palmore, 1990) and "empirically sound" model for explaining attitudes and their conceptualization (Meshel, 1997, p. 12) attitudes can, with greater reliability and validity, be assessed using a semantic differential (Fishbein & Ajzen, 1975). These types of instruments, which include the Aging Semantic Differential scale used in this study, use the rating of targets on bi-polar evaluative dimensions by subjects to measure attitudes. Using this assessment approach, general attitudes toward older adults can be categorized as being negative, positive, or neutral (Vernon, 1999).

### Intergroup Contact

In recent decades, research on intergroup contact has expanded across disciplines and into new context areas. Advancing beyond its original race/ethnicity focus, investigators today are testing contact theory on a wider range of target groups (i.e., stigmatized social groups whose members frequently are targets of prejudice and discrimination) and subjects (Oskamp, 2000). College students, children, adolescents, and adults have all served as subjects in more recent contact studies. Included among the new target groups studied are the physically disabled (Anderson, 1995), homosexuals (Herek & Capitano, 1996), the mentally ill (Deforges, Lord, Ramsey, Mason, & Van Leeuwen, 1991),

AIDS victims (Werth & Lord, 1992) and, older adults (Caspi, 1984). Even with the broadening of intergroup research, findings, for the most part, support Allport's contact hypothesis, however (Pettigrew, 1998). Demonstrating this are recent findings by Pettigrew and Tropp (2000); Kraus (1995); Whittig and Grant-Thompson (1998); Stangor, Jonas, Stroebe, and Hewstone (1996); and Fresko (1997).

Increasing the understanding of the influence of contact on prejudice, Pettigrew and Tropp (2000), conducted a massive meta-analysis of intergroup contact studies across target groups. Their sample consisted of 203 studies focusing on a variety of target groups including older adults. Overall, 94% of the studies reviewed showed an inverse relationship between contact and negative attitudes. In addition, contact was shown to have a moderate effect size ( $d = -.42$ ) in reducing prejudice. A larger effect size was found for those studies in which the participants had no opportunity to avoid a given contact situation (Oskamp, 2000). Kraus (1995), in another review, found similar patterns and findings. Based on his findings he concluded that contact (i.e., experience) is one of five attitudinal variables predictive of behavior.

Empirical support for contact theory has, in recent times, also come from research targeting groups outside the cross-age relations arena (Mills et al., 1998). Whittig and Grant-Thompson (1998), for example, conducted a study on the effects of contact on attitudes within an interracial context. More specifically, they investigated the influence of five different contact conditions on the attitudes of middle school and high school students participating in a racial awareness program: (a) voluntary contact supported by authorities, (b) equal-status contact,

(c) cooperative/interdependent contact, (d) contact providing the potential for friendship across groups, and (e) stereotype disconfirming contact. These were five conditions alluded to by Allport (1954) in his earlier works on the original contact hypothesis. Analyzing the results, Whittig and Grant-Thompson found that it was the combination of all five contact conditions which were important. Following the study, teachers reported that they were seeing a clear improvement in the students overall interracial attitudes. In addition, they reported that students in general had begun to show increased comfort in talking about racial issues, recognition of the worth of others, and initiation of interracial friendships.

In another ethnicity-based study, Gaertner et al. (1994) examined contact and its influence on the interracial biases of students attending a multicultural high school. Findings, consistent with those of Whittig and Grant-Thompson (1998), showed significant decreases in intergroup bias as favorable contacts between multicultural students increased. Explaining this change, Gaertner et al. (1994) concluded that attitudes improved because of contact which had effectively influenced a change in the social schemas of students from a pre-study "us" and "them" mind set, to more of a "we" focus.

Stangor et al. (1996), in a related study, examined the effects of student foreign exchange on attitudes and stereotypes instead. Ultimately, they found that both amount of contact, and quality of contact, were significant factors in the reduction of negative attitudes taking place between foreign students. Finally, Fresko (1997), examined contact and its effect on the attitudes toward children being tutored by 323 Israeli university tutors. Data revealed that tutors attitudes,

in general, became more positive as contact with their disadvantaged, under-achieving, PERACH program tutees increased.

Despite empirical evidence supporting contact theory, questions still exist about the overall efficacy of intergroup contact and the optimal conditions under which it must take place to be effective. Alreshoud and Koeske (1997), for example, examined Saudi Arabian students enrolled in U.S. educational programs and their attitudes toward American students. This investigation revealed that increased inter-cultural contact with American students had little or no positive effect on the attitudes of Saudi Arabian students.

Adding to the inconclusiveness are past reviews and meta-analyses characterizing past research as being incomplete and too subjective (Benedict, 1999). Many of these studies also arrive at sharply differing conclusions. While some reviews have provided support for contact theory (Pettigrew, 1998) others have been mixed (Stephan, 1987), or even in opposition (Ford, 1986). Emphasizing the inconsistency in findings, Connolly (2000), in conducting his own broad review of the contact hypothesis literature, determined that while numerous studies in general have identified positive attitudinal effects of intergroup contact using various target groups in various contexts (Pettigrew, 1997; Wood & Sonleitner, 1996), other researchers (Sigelman & Welch, 1993) continue to suggest against being naïve and overly optimistic about the efficacy of contact.

#### Assessment Issues in Attitude Research

Others, including Slotterback and Saarnio (1996), suggest that mixed results and disparities found in attitude research are due to a general lack of



methodological rigor and conceptual clarity. This, in part, is attributed to a lack of consistency in how various constructs (e.g., closeness versus intimacy, attitudes, older adults) are defined, operationalized, and even measured. In emphasizing this, Slotterback and Saarnio (1996) stressed that the construct *attitudes* is often, and incorrectly, used interchangeably in research with other constructs such as intentions, beliefs or prosocial behavior. Reis and Patrick (1996), in a similar manner, argue that while the constructs intimacy and closeness are often used interchangeably in research, in actuality they are two distinct concepts.

Other reviewers have also criticized the research for being "methodologically sloppy" owing in large part to "a narrow range of methods...and the uncertain psychometrics qualities" of many of the instruments used in the research (Kite & Johnson, 1988, p. 233). Many such studies, it is argued, have utilized measures whose psychometric properties are not adequately tested (Crockett & Hummert, 1987).

In one example, Mills et al. (1998), examined cross-age contact and its influence on grandchild-and-grandparent relations. Investigators, after developing a written questionnaire, set out to assess a sample of adult-aged grandchildren about their overall relationship with a grandparent and the quantity and quality of contact experienced. In gathering this data, investigators only asked subjects one multiple-choice question about their contact experience, however. Asked to describe their experience, subjects were provided only five broad and limited descriptors to choose from in describing their overall relationship with their grandparent: (1) frequent contact and very involved, (2) frequent contact and not very involved, (3) infrequent contact and not very

involved, (4) infrequent contact but very involved, or (5) no contact.

Consequently, the variation in experience, which may have been reported otherwise by subjects, was minimized. Later, Mills et al. (1998), in a follow-up journal article, identified specific limitations and errors in the study's design and assessment. Subsequently, they also acknowledged that contact (e.g., quantity versus quality) and involvement had not been explicitly enough defined in their study, nor measured.

Hale (1998), in a study on the effects of age and interpersonal contact on the stereotyping of older adults, assessed the extent of the participants' total contact quantity and quality with older adults using a brief eight question contact survey. Included in the survey was only one multiple-choice question designed to measure the multi-faceted factors of general frequency/context of contact, quality, intimacy, and satisfaction level of the contact.

Brussoni and Boon (1998), examining the impact that a close grandparent may have on a young adult assessed the factor, degree of closeness experienced by the young adult, using only one multiple-choice question. Within the same questionnaire, the complex construct, intimacy was measured using responses from just two questions asked of respondents.

Other researchers, in assessing contact, have chosen, for the most part, to ignore the influence that quality of contact may have on attitude formation. Roberto and Skoglund (1996) for example, examined differences between the relationships young adults have with their grandparents versus their great-grandparents. In assessing contact in this study, they chose to ignore any quality of contact indicators for the most part. Instead, they chose to focus their

research attention on data related to the frequency, or quantity, of contact only (e.g., face-to-face interactions with each set of relatives, phone contacts, dinners together, family gatherings). Gorelik et al. (2000) in another study, examined the effect that contact with older adults has on one's interest in aging. In gathering data, they too chose to focus little or no attention on the effects that the quality of contact had on the respondents' interest in aging.

The present study seeks to remedy these identified assessment problems by using the Aging Semantic Differential (Rosencranz & McNevin, 1969) to assess study participants' attitudes toward older adults. In addition, the Miller Social Intimacy Scale (Miller & Lefcourt, 1982) will be used to measure the key quality of contact-related independent variable, social intimacy, which has often been ignored by researchers. The Aging Semantic Differential (ASD) scale is widely-used and has been shown psychometrically to be a valid and reliable measure of attitudes (Meshel, 1997). The Miller Social Intimacy Scale (MSIS) has also been shown to be empirically sound in measuring intimacy frequency and intensity within a relationship.

#### Cross-Age Contact and Attitudes Toward Older Adults

Caspi (1984) first demonstrated the validity of contact theory in a context outside interracial relations. He achieved this with his groundbreaking study investigating the effects of cross-age contact on the attitudes toward older adults of 38 children from two child care facilities. In his study he found that children who attended a child care facility employing older adult teachers aides (i.e., age 60 or over) reported significantly more positive attitudes toward older adults in general than did those attending a facility where no such contact occurred.

Children having daily contact also exhibited a significantly higher ability to discriminate between age-group categories. This variable was assessed by Caspi using a task in which each child was asked to distinguish whether designated target individuals were middle-aged or older adults instead. Because of his study, Caspi ultimately is credited with (a) initiating the substantial line of research on contact and cross-age relations which exists today (Hale, 1998) and (b) demonstrating, for the first time, the positive effects of contact on the cross-age attitudes of children (Schwartz & Simmons, 2001). In the two decades since, interest in the assessment of attitudes toward older adults has grown. This increase, in part, has been generated by Caspi's work, and beliefs that older Americans are negatively perceived. Underlying this belief is the assumption that, like with any group, how older adults are perceived ultimately influences how they will be treated (Knox et al., 1995).

Since Caspi's study, other studies have examined the attitudes toward older adults of individuals at various life stages. Most of these studies have used as its respondents or subjects individuals from one of two different age groups in particular; pre-adults (i.e., children and adolescents), and young adults. As a result, attitudes toward older adults of middle-aged and older adults themselves have been ignored to some extent over the years. Consequently, much less is known about (a) the middle-aged and older adults' cross-age attitudes toward older adults, and (b) the extent to which an individual's own age or stage of life (e.g., childhood, middle adulthood) contributes to the attitudes he or she holds toward older adults.

Ultimately though, even if only research examining the attitudes toward older adults of children, adolescents, and young adults is considered, there still is no consensus about how older adults are perceived by society (Knox et al., 1986). Supporting this are the findings of recent literature reviews which suggest that attitudes toward older adults in general, are negative (Angiullo et al., 1996; Schwalb & Sedlacek, 1990). In contrast, others suggest that attitudes toward older adults are generally mixed or neutral (Mosher-Ashley & Ball, 1999), or even positive (Hummert, Garstka, Shaner, & Strahms, 1995; Kite & Johnson, 1988; MacNeil et al., 1996; Mitchell, 1997; Nussbaum, Hummert, Williams, & Harwood, 1996).

Angiullo et al. (1996), in an examination of cross-age attitudes toward older adults and their stability over time, compared the cross-age attitude responses of 186 young adult undergraduates to those reported in a study on college students' attitudes conducted 27 years earlier (Rosencranz & McNevin, 1969). The results of this study showed that today's college students in general still hold attitudes toward older adults which are predominantly negative. When comparing the negative attitudes toward older adults of the two samples it was also determined that college students' attitudes had even worsened over time and become significantly more negative.

Hawkins (1996), in the same year conducted a study which examined a sample of 420 college students and their evaluations of older adults in three target age groups (i.e., the young-old [i.e., 65-74 years old], old-old [i.e., 75-79 years old], and centenarians [i.e., 100+ years old]). Findings from this study, much like those of the study by Angiullo et al. (1996), indicated that attitudes of

young adult college students toward older adults are, in general, negative. In addition, the study revealed that college students tend to hold negatively stereotypical views of older adults as being conservative, complaining, and pessimistic. Adding to the evidence, negative attitudes expressed toward older adult targets within the study increased as the age of the target increased. Ultimately, the study participants evaluated the centenarian targets much more negatively than they did the old-old or young-old targets.

In contrast to this view is a study by MacNeil et al. (1996) who found in general that college students hold positive attitudes toward older adults. In this examination of the age stereotyping of 490 college students, respondents were asked to evaluate three different target individuals (i.e., a young stimulus person, middle-aged stimulus person, and old stimulus person) on the basis of various dimensions. A subsequent ANOVA of the data revealed that no significant age-based stereotyping of older adult targets occurred. Instead, study participants, on the average, rated the oldest target person of three the most positively on eight of seventeen attitude items assessed. Based on this, investigators concluded that the prevalence of age stereotyping in the U.S. has been exaggerated. They also concluded that society's attitudes toward older adults may actually be improving and becoming more positive over time.

Next, Newman et al. (1997) in a study examining the views of children toward aging and their attitudes toward older adults, found in general that children have positive perceptions of, and emotional responses to, older adults overall. In addition, the typical child in this study reported having negative feelings about their own aging, as well. Children also tended to perceive

observable aspects of aging in the context of physical changes but, in general, made very few negative judgments about aging characteristics.

Findings by Bell (1992), in a study that examined the media's evolving portrayal of older adults over time, add additional support. In his study Bell found that the media's historically negative television portrayals of older adults had begun to be replaced with fairly positive portrayals of this age group. Included among these changes by the media were more positive portrayals of older adults as more affluent, healthy, active, admired, and even sexier than in the past. Atchley (2000), also studying the media's images and their contribution to the ageist thinking and behavior, found that the portrayal of older adults on continuing television series, and public affairs and talk shows, was becoming more positive.

Hummert et al. (1995), in a study on young adults' attitudes, also found older adults to be viewed positively. In fact, respondents in this study described older adults favorably as being wise advisors and caring grandparents.

Finally, O'Hanlon and Brookover (2002), in a pre-test post-test experiment examining the influence of contact on the cross-age attitudes of undergraduates, found contact, in general, to be significant. Of the 55 gerontology class students included in this study's sample, most, in the end, described the interview activity included in the study (i.e., interviewing an older person about their life) as being an extremely valuable and influential experience for them.

In summary, more than two decades have passed since Caspi (1984) first established the connection between intergroup contact and the attitudes of others toward older adults. In research conducted since then, findings have

been inconclusive regarding whether attitudes toward older adults of others in the U.S., regardless of their age, are, in general, positive, negative, or neutral. In addition, while research has suggested a positive relationship between intergroup contact conducted under certain conditions and intergroup attitudes, most studies have tended to ignore the attitudes toward older adults held by middle-aged adults. Instead, they have focused on the examination of young adults' and pre-adults' attitudes predominantly. Consequently, attitudes held by those in middle adulthood (i.e., those who today tend to serve as primary caregivers to the old in the U.S.) are less apparent and understood. In addition, less is also known about the evolution of attitudes toward older adults in one individual over time as they themselves advance through early adulthood into their middle adult years and beyond. Knowledge about these changes related to one's own aging may be of importance because it is during the advancing stages of life in particular that individuals become increasingly confronted with the inevitability of their own aging and approach of later adulthood.

#### Cross-Age Quantity of Contact Versus Quality of Contact

In another criticism of cross-age research, Knox, Gekoski, & Johnson (1986), argue that contact with older adults often is inadequately assessed because only quantity of contact--not quality of contact--is measured. Contact, according to these investigators, is a multidimensional variable. They contend that quantitative aspects of contact have been over-emphasized by researchers in the past, and that quality of contact may be more significant a factor than the quantity of contact with an older adult (Mills et al., 1998). Adding to the criticism are others arguing that even when investigators claim to be interested in



examining the quality of cross-age relationships, their tendency is to focus on aspects of relationship quantity (e.g., frequency, duration), instead of quality (Boon & Brussoni, 1996).

Implications like these are in direct contrast to a body of literature that suggests frequency of interaction is a sufficient measure by itself of contact (Boon & Brussoni, 1996). Much of the research on grandparent-grandchild relations, for example, has been guided by the assumption that the more contact an individual has, the more positive his or her perceptions of the relationship with a grandparent will be (Mitchell, 1997). Consequently, studies that directly address issues of relationship quality or strength in this area are still comparatively rare. This is true despite past research suggesting that mere frequency of contact alone is a poor predictor of grandchild/grandparent relationship quality (Boon & Brussoni, 1996). Demonstrating this emphasis on quantity of contact, Hodgson (1992), surveyed 208 adult grandchildren regarding their relationship with their closest grandparent. In this study, closeness to a grandparent was found to be derived predominantly from contact quantity. In fact, proximity and frequency of contact were the two most cited reasons given by subjects explaining their own designated choice of "closest" grandparent. (Mitchell, 1997).

Conducting quantity of contact research outside the grandparent-grandchild arena, Gorelik et al. (2000) investigated undergraduate contact with older adults and its effect on their interest in aging. Measuring respondent contact, investigators surveyed students about their frequency and type of contact with family (e.g., parent, grandparent) and non-family members

(e.g., work/ volunteer, mentor/teacher) only. Ultimately, no attempt was made by the investigators to assess grandparent-grandchild relationship quality, or consider its influence on cross-age attitudes.

In contrast are contemporary studies which place equal, and even greater emphasis at times, on the importance of relationship quality over quantity and its effectiveness in the promotion of more positive cross-age attitudes. Silverstein and Parrot (1997), studying young adult contact with grandparents and its effect on their attitudes toward older adults in general, found that the frequency of contact with a grandparent is not predictive of how the young adult feels in general about the funding of programs for the elderly by the government. In contrast, however, quality of contact, as represented by the intimacy experienced in a young adult's grandchild-grandparent relationship, was positively and strongly-correlated with their views on the government funding of programs for the elderly. In essence, those individuals who reported having more intimate relationships with their grandparents also expressed more support for the funding of programs providing support to the elderly.

Examining the attitudes of older adults toward older adults as well, Hale (1998), in a contemporary survey study of 50 young adults (i.e., 18 to 25 years old) and 50 older adults (i.e., 64 to 79 years old), found that regardless of age, respondent knowledge of aging and application of aging stereotypes were affected by the quality of contact they experienced.

Mitchell (1997), examining relationship quality also, surveyed 159 St. Louis University young adult coeds regarding their relationships with grandparents and their attitudes toward older adults in general. Results of the

study show that college students who perceive high levels of companionship, nurturance, affection, satisfaction and admiration, and low conflict in their relationships with grandparents are more likely to perceive older adults in general as adaptive and accepting of change, likable and social, and stable and mature.

Finally, Schwartz and Simmons (2001), in direct contrast to the body of literature suggesting that quantity of contact alone is sufficient in promoting positive intergroup attitude change, hypothesized that a single factor, quality of contact, not quantity of contact, is predictive of attitudes toward older adults. In effect, the investigators suggest that relationship quality alone adequately captures the positive conditions of contact needed for positive attitude change to occur. In their survey study of 62 undergraduates, results from a two-way ANOVA confirmed their hypothesis. Results showed that self-reported quality of contact with older adults, but not quantity of contact, is significantly related to participants' attitudes toward older adults.

In sum, questions about the sufficiency of quantity of contact versus quality of contact and the effect of each on cross-age attitudes remain. Essentially, study results have been mixed and opinions about the importance of each factor differ greatly among researchers. In addition, studies which directly address issues of relationship quality (e.g., intimacy) or strength are still rare compared to those studying quantity or frequency of contact (Boon & Brussoni, 1996).

#### Cross-Age Intimacy and Friendship

Intimacy consists of a process involving an individual's expression of personal feelings and information to another which is responded to in a way that

makes the individual feel known, validated, and cared for (Benner & Hill, 1999). In general, evidence suggests that intimacy promotes human well-being. In fact, people who lack intimate relationships are shown to have higher mortality rates, higher risk for illness, and more accidents. Those lacking intimacy are also found to have increased feelings of loneliness and higher rates of psychological disturbance. Individuals, motivated to share intimacy, are more loving and affectionate, more egalitarian, and less self-centered than others. They tend to spend more time thinking about people and relationships, talk and write to others more, and are more tactful and less outspoken than those not having intimate relationships (Benner & Hill, 1999). Because of this, a better understanding of successful intimate relationships in general, and an identification of factors contributing to such relationships, are needed (Levinson, 1995).

Thus far, the issues addressed by research on intimate relationships have depended on the life stage (e.g., adolescence) and relationship type (e.g., marriage, parent-child relationship) studied. Adolescence, early adulthood, and, to a lesser degree, middle adulthood are life stages that research has explored. The literature on intimate relationships also is largely confined to certain relationship types. Little or no mention is made in the literature about intimacy within parent-child relationships, for example (Levinson, 1995). Also, in studying intimacy, Schaefer and Olson (1981) identified different types of intimacy shared in relationship dyads: social, emotional, intellectual, sexual, recreational, spiritual, and aesthetic. Social intimacy, which will be examined within the context of cross-age relations in this study, has been described as consisting of friendship, primarily. For young adults, intimacy in the form of

friendship may serve as a key self-clarifying function helping them to identify goals, values, and ideals. Older adults, it is shown, find support and validation in intimate friendships instead (Levinson, 1995). In middle adulthood, however, there is generally less contact with intimate friends. Within this life stage, men in particular report lacking intimate friendships. This is due in combination to the extensive work and family obligations of middle-aged men, and male sex role restrictions they may experience (Levinson, 1995).

Within the literature, research focusing specifically on intimacy and its role in cross-age relations and attitudes toward older adults is limited. In addition, little or no research is found regarding social intimacy specifically and its relationship to attitudes toward older adults. This void in the research exists despite the identification of intimacy early on by contact theorists as a possible important contributing factor in the association between contact and positive intergroup attitudes (Amir, 1994; Cook, 1962). Some theorists and researchers in particular emphasize the potential importance of intimate contact in terms of either the (a) personalized understanding of members of other groups, or (b) the opportunity to make friends with out-group members (Pettigrew, 1998). Cook (1962), focusing on inter-racial relationships and attitudes, emphasized the importance of intimate contact (i.e., in the form of friendship potential) and its role in intergroup relationships. In doing so, he coined the term *acquaintance potential* to describe the occasion provided by a particular situation for individuals to understand and become more familiar with each other. Cook (1962), in his work, also stressed the potential importance of intimacy as a key factor in the determination of whether positive intergroup attitudes are generalized and carried

over from the original contact situation to attitudes toward other members of an out-group. Later Amir (1969), in his own review of research on the effect of intergroup contact on ethnic and racial relations, identified intimate contact as a key facilitating factor contributing to the intergroup attitude change process. Allport (1954), in his early work, also alluded to the importance of intimacy. He suggested that intimate contact was more favorable than trivial contact.

More recently, studies by Brussoni and Boon, (1998), Mitchell (1997), and Hale (1998), have examined, in varying degrees, the role of intimacy and its influence on the formation of positive intergroup attitudes. Results, from these studies, have been limited and inconclusive, however. Brussoni and Boon (1998), for example, in a survey of 171 young adults, asked coed respondents to evaluate their relationship with their closest grandparent in terms of relationship strength and emotional closeness. Relationship strength, for the purpose of the study, was assessed in terms of four dimensions: (a) emotional closeness, (b) perceived influence, and (c) importance, and (d) intimacy. As predicted, relationship strength was found to be positively related to intimacy and each of the other three impact variables assessed. Despite these findings, the results of this study provide little progress toward answering questions about the role of intimacy in intergroup relations and attitudes. This is because investigators, by their own admission, used a "crude index" (Brussoni & Boon, 1998, p. 272) comprised of two items only to measure the degree of relationship intimacy experienced by study respondents.

Mitchell (1997), also investigating the grandparent-grandchild relationships of young adults, examined the relationship between contact quality and attitudes

toward older adults in general. Study results revealed that those college students who reported that they had high relationship quality and support in their relationship with their grandparent, also reported more positive perceptions of older adults in general. Specifically, they rated older adults as being more adaptable and accepting of change, more sociable and likeable within a social context, and more mature and stable, than did the other respondents. According to Mitchell, increased contact quality and relationship support, as it occurs in a grandchild-grandparent relationship, consists of intimacy, as well as affection, satisfaction, and instrumental aid.

Finally, Hale (1998), in a study examining the effects of age and contact on stereotyping, chose to measure the variable, contact intimacy using only one self-report item. In effect, respondents were asked to characterize their time spent with older adult individuals as either, extremely close, moderately close, neutral, or not at all enjoyable. From limited data, Hale ultimately found that subjects reporting a history of frequent and positive experiences (e.g., more intimate experiences) achieved higher knowledge of aging scores and lower stereotype scores than others.

Specifically highlighting the importance of the factor *friendship*, Pettigrew (1998) in a recent review of contact theory research, concluded that positive emotions aroused by optimal contact can mediate intergroup contact effects. In addition, he suggests that positive emotions aroused by friendship are key factors in attitudinal change. Adding further emphasis, Pettigrew also suggests that optimal intergroup contact requires time for cross-group friendships to develop, and cannot be short-term in nature. In support of Pettigrew's views,

Rippl (1995), in a study examining the relationships between West and East German subjects, found friendship to be key determinant of positive relationship development.

Reif & Melich (1991), in what may be the most extensive data on intergroup friendship gathered to date, surveyed more than 3800 Western Europeans in seven probability samples across France, Great Britain, the Netherlands, and West Germany. Individuals surveyed were asked about their attitudes toward major minority groups in their country. They were also asked about whether they had friends different from themselves in regards to either nationality, culture, religion, or social class. Findings revealed that Europeans who reported having out-group friends scored significantly lower on five prejudice measures. In addition, it was found that those claiming to have intergroup friendships were significantly more likely to report feeling sympathy and admiration for the out-group as a whole (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997).

Using longitudinal data, Smith (1994) found that contact, meeting Allport's originally identified conditions, decreased prejudice among black and white neighbors even though group differences in the effects were also identified. This supported findings found in a national probability sample survey indicating that friendship is a strong predictor of the racial attitudes of blacks (Power & Ellison, 1995).

In an even more contemporary study in which the influence of friendship on relationships outside the cross-age realm also was examined, Wittig and Grant-Thompson (1998), investigated the relationship of five contact conditions



thought to be related to increased positive attitudes. Among this five was contact providing the potential for friendships across groups. The sample for the study consisted of middle and high school students who were participating in a school-based racial awareness program designed to ameliorate existing racial prejudice on the basis of the five contact conditions already identified. Investigators, analyzing the data on the teachers' ratings of students, discovered that it was the joint incidence of all five conditions, rather than any single condition by itself, that was most predictive of the inter-racial attitude and behavior improvement witnessed by the teachers. Despite these studies, however, Wright et al. (1997) found relatively few contact studies within the existing literature that used affective dependent variables such as friendship or social intimacy in their design.

#### Attitudes Toward "Representative" Versus "Familiar" Targets

Target specificity, refers to the degree of familiarity an individual has with an out-group target they are evaluating. It is also an area of interest to contemporary researchers in intergroup relations. Specifically, investigators hope to learn more about the relationship between out-group target familiarity and an individual's subsequent perceptions and attitudes toward the out-group as a whole. Of particular concern is whether individuals' attitudes toward specific, familiar, or known out-group targets differ from attitudes toward unfamiliar generic or representative out-group targets or members. In essence, there is a focus on determining whether the amount of information an individual is furnished about an outsider affects his/her evaluations of that outsider as well as his/her attitudes toward the out-group in general.

Of primary interest in the area of cross-age relations and ageism, is (a) the difference between individuals' attitudes toward known or familiar older adults (e.g., a close grandparent) and attitudes toward generic, representative older adults (e.g., an unknown older adult seen only in a photograph), and (b) the role that familiarity plays in determining whether attitudes toward an older adult ultimately are carried over and generalized to the broader, less specific, out-group as a whole (i.e., all older adults age 65 years and older). Highlighting the importance of generalization, Mitchell (1997) suggests that for many young people, contact with older adults is limited to their relationship with a grandparent. Based on this, she has hypothesized that the ideas and feelings that individuals associate with older adults as a whole are generalized, to a great extent, from relationships with grandparents. Investigating this, Mitchell (1997), surveyed a sample of 159 St. Louis University coeds regarding the quality of their grandparent-young adult relationship and its overall influence on their attitudes toward older adults in general. From the survey, she found that perceived social support by a grandparent was an independent factor that was positively correlated with a young adult college student's attitudes toward older adults in general. More specifically, results showed that college students having greater quality and receiving more support in their grandparent relationship viewed older adults in general as being more adaptive and accepting of change ( $r = .46, p < .01$ ), more mature and stable ( $r = .21, p < .05$ ), and more sociable and likeable within a social setting ( $r = .30, p < .01$ ).

Celejewski and Dion (1998) in a quasi-experimental survey study of 101 young adults (average age of 19.68 years) and 68 alumni association individuals

(average age of 72.69 years) had respondents rate either themselves or unfamiliar targets from one of three adult age categories: young, middle-aged, or elderly. Supporting the contribution of familiarity in the formation of positive attitudes, these researchers found that the older adult self-evaluations, and self-evaluations by those who were asked to imagine themselves as elderly, were significantly more positive than the ratings of those asked to evaluate an unfamiliar older adult target.

In an earlier classic study conducted by Sanders and Pittman (1988), attitudes of high school and college students toward known elderly, and general target elderly described only by gender and age, were examined. Ultimately, students rated known elderly more positively than generalized elderly individuals. According to results, the investigators concluded that individuals, when given the opportunity, use information other than age and gender only when evaluating older adults. However, if no additional information is provided about an older target, stereotypes about older adults emerge in the attitudes of an individual toward older adults. According to the investigators, differences in attitudes toward known and unknown older adults are due to differences in direct experience or knowledge about the individual.

In a more recent study, Scarberry, Ratliff, Lord, Lanicek, and Deforges (1997) found that generalization was maximized when the psychological linkage between the specific out-group target and his/her group were salient to the extent that the target's positive qualities could be viewed by the observer as being similar to those of the out-group as a whole.

Because of the inconclusive and limited amount of evidence found regarding target specificity and the generalization of attitudes, the current study will examine, in part, individual attitudes toward "most familiar" older adults and its association with attitudes toward the less specific group, older adults in general.

### The Generalization of Attitudes From Target

#### Individual to the Out-Group

While empirical evidence exists documenting the potential for negative intergroup attitude reduction resulting from cooperative contact, issues regarding the validity of the contact theory remain. In recent years, research interest in intergroup contact has been generated by questions about (a) the generalizability of attitudes beyond the contact situation to the out-group as a whole (Brewer & Gaertner, 2001; Pettigrew, 1998; Scarberry, Ratcliff, Lord, Lanicek, & Deforges, 1997), and (b) the best way to structure intergroup contact so that generalization of attitudes beyond the contact situation is maximized (Oskamp, 2000).

Ultimately, the goal of contact intervention is the reduction of negative attitudes toward whole social groups and not just specific group members (Brewer & Gaertner, 2001). Therefore, the generalization of attitudes beyond the immediate contact situation is pivotal. Despite this, however, research in this area has been limited and has produced mixed results. In conducting studies in the area, researchers have predominantly focused only on the assessment of attitudes toward the out-group contact situation participants themselves and not beyond. Consequently, evidence supporting generalization is sparse. In addition, while some studies have examined both specific attitude change and

attitude change toward the out-group, generalization of attitudes from the individual to the group, in general, have not been found. In effect, only a few studies have found generalization of attitudes to occur (Scarberry et al., 1997).

Also of concern to researchers has been the question of how best to structure contact (Oskamp, 2000). Historically, contact theorists have debated which type of contact is most salient in regards to the generalization of attitudes beyond the immediate intergroup contact situation to the group as a whole. In response to this debate, three related but different models of structured intergroup contact have been proposed. Each differs in terms of its view of the optimal conditions for effective contact and the generalization of attitudes toward the group as a whole (Brewer & Brown, 1998)

Traditional contact theorists, in general, have supported the *decategorization* model (Brewer & Miller, 1984, 1996) of social categorization. This model maintains that intergroup contact must be non-superficial and individualized to be effective. In essence, contact must provide individuals the opportunity to get to know out-group members as individuals first. In support of this perspective, Brewer and colleagues (Brewer & Miller 1984; Miller & Harrington, 1992), explain that interpersonal contact is effective because it allows for (a) the de-emphasis of group factors and (b) the differentiation of the individual from the group. Consequently, participants in the contact situation under this scenario will treat each other as individuals. Because of this, the potential for social competition between the interacting individuals also is reduced.

Hewstone and Brown (1986), in contrast, maintain that *subcategorization* best explains attitude change. In this model, intergroup contact is emphasized, not individualized contact. According to this perspective, the possibility that positive change in attitude will be generalized to the group as a whole is maximized when out-group members are perceived as group members, not as individuals.

Finally, *recategorization* (Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993) represents a third model of categorization. In contrast to the others, this model maintains that contact is most effective when it promotes a common in-group identity; one in which interacting out-group participants have been persuaded to perceive each other as being members of one larger superordinate in-group (Dixon, 2001).

#### Living With an Older Adult

In general, experience and direct contact with older adults has been hypothesized as being associated with more positive attitudes toward older adults. However, findings on this have been contradictory. Research on the effects on attitudes of living with an older adult, for example, has been sparse and inconclusive. Offering an explanation for the mixed findings on direct contact, Knox, Gekowski, and Johnson (1986) have argued that contrasting results can be explained, in part, by how contact has been measured. They argue that most studies have relied on simple descriptions of contact, emphasizing quantity of contact. Their research has demonstrated that the quality of the relationship, not simply the quantity, is an important descriptor (O'Hanlon & Brookover, 2002).

Of the few studies found considering this particular aspect of direct contact, several found that living with an older adult was insignificant. For example, Sanders and Pittman (1988), in an early study on attitudes toward known versus generalized older adults, found factors related to direct contact experience (e.g., living with an older adult, volunteering with the elderly) to be only minimally and inconsistently associated with attitudes.

Hawkins (1996), in a more contemporary study, also found living with an older adult to be insignificant in terms of its association with respondent attitudes. Accordingly, of the 47% of students in the sample that reported having lived with an older adult, most reported significantly more positive attitudes toward older adults in general.

Finally, Mosher-Ashley and Ball (1999), in a study on attitudes toward older adults and one's own aging--using a total sample of 119 undergraduates--found only five students who reported ever having lived with an older adult before. Based on such a small sample size Mosher-Ashley and Ball determined, using a Mann Whitney U test, that this factor was not significant ( $U(5/118) = 234$ ,  $p = .068$ ). However, according to the investigators, there may not have been sufficient power based on the small sample size ( $n = 5$ ) to accurately assess a difference even if one did exist.

In contrast, Sunar (1988) found that students having older live-in relatives had less positive views of older adults in general, regardless of the attachment they felt for the specific live-in family member. In fact, of the 152 undergraduates that were surveyed, 73% reported that the live-in relative created conflict.

### Perceiver's Race

Culture is an important environmental factor that overlays the aging process. In effect, cultural and social norms influence attitudes toward older adults. They define the roles that older Americans fill, as well (Holmes & Holmes, 1995). Because different cultures view aging differently the relational worlds of older adults are impacted. According to Holmes and Holmes (1995) some cultures treat older adults with respect and reverence, viewing them as "almost ancestors". Other cultures, fearing death, view older adults as being "already dead" or "nearly dead".

Zandi, Mirle, and Jarvis (1990) explain why older adults are viewed differently from one culture to another. They report that in many of the more traditional societies (Eastern cultures), older adults are highly respected and seen as historians. Accordingly, older adults in these societies are considered valuable sources of wisdom. In Japan, for example, chronological age serves as a measure of social status (Kimmel, 1988). In contrast, in more modernized youth-oriented cultures where technological advances are valued, the skills of the older person are looked upon by many as being unessential or obsolete (Massino, 1993). Ironically, while negative attitudes toward older adults are thought to be less prevalent in those cultures in which the older adult is revered, little empirical evidence supporting this belief is found in the literature (Sharps, Price-Sharps & Hanson, 1998).

In fact, Sharps, Price-Sharps and Hanson (1998), conducting their own investigation, found that rural Thai students had significantly more negative attitudes toward older adults than did their American sample counterparts. These



results were considered somewhat surprising because Thailand is a culture which is widely reported to maintain a strong tradition of filial piety. In this study however, mixed-design analysis within a multivariate model revealed significant overall effects of nation ( $F(1,85) = 19.45, p < .001$ ); attitude ( $F(3,83) = 33.85, p < .001$ ); and the interaction of nation with attitude ( $F(3,255) = 13.12, p < .001$ ).

Hurme (1997) conducting a large Finnish-Polish study on relations between grandchildren, parents, and grandparents found substantial cross-cultural differences in the ways adolescents described their grandparents and their relationship with them. Poles ultimately described their relationships with their grandparents in more positive terms than did the Fins. In doing so, for example, they mentioned more often the personality and feelings of their grandparents. Polish adolescent grandchildren also claimed to receive more emotional and intellectual support from their grandparents. These differences in relationships, according to Hurme, could be explained in one of two ways. He concluded that Polish adolescent grandchildren either have closer relationships in general with grandparents than Fins, or they report on their relationships in different ways.

Also, other recent research on ethnic diversity suggests that norms of filial responsibility (i.e., one's responsibility to care for an older parent or other family member) vary culturally and on the basis of racial/ethnic background also. Much of this research implies that attachment to such norms is stronger among Black and Hispanic families than it is among non-Hispanic white families (Burr & Mutchler, 1999). This same research however makes no claims about the attitudes of family members toward their older relative or older adults in general.

While researchers such as Benedict (1999) contend that the empirical evidence suggesting that socio-demographic characteristics such as race play a role in the determination of attitudes toward older adults exists, others suggest that research investigating the effects of race on cross-age attitudes is limited, controversial (Tanksley, 1995, p. 33), and inconclusive. Laditka and Laditka, (2001), maintain that race, gender, family roles and other factors are pivotal organizing factors in American society today, however.

Hawkins (1996), in completing a study on college students' attitudes toward older adults, concluded that there is a need for future research that thoroughly examines factors such as race and gender and their relation to perceptions of the elderly. In the study, she found that Asian Pacific Islander respondents reported more negative views of older adult targets 100+ or older than did other respondents groups. However, in reporting this finding, she also emphasized, that the racial breakdown in the study of 420 college students and their attitudes toward older adults was too small for meaningful statistical analysis.

Using Palmore's Facts on Aging Quiz and an aging semantic differential scale, Tanksley (1995) examined the attitudes of coeds. In comparing knowledge and attitudes toward older adults of African-American freshman college students from a historically black college in Florida and white freshmen' attitudes and knowledge at a predominantly white Florida' college, she found that attitudes toward older adults for both cohort groups were positive. African-American students, however, reported less positive attitudes than whites, who

had more knowledge about aging also. In contrast, in studies by Benedict (1999) and Sheffler (1998), race was not found to be significant.

### Perceiver's Gender

In the broad area of relationships, research findings suggesting gender differences are common. Studies have shown that males and females significantly differ in their interpretation of what constitutes a close relationship. Significant gender differences have also been found in other relationship areas such as friendship patterns, interaction styles, and intimacy (Beall & Sternberg, 1993).

Today it is generally a given that daughters, or other female family members, will be the principal providers of social support to older adult parents if care is needed. Examining gender differences in caregiving, Silverstein, Parrott, and Bengston (1995) found that sons typically provide support based on principles of obligation and familiarity. In contrast, daughters seem more influenced by intimacy and altruism. Thus, women, in taking on the family care giving lead, are motivated predominantly by intergenerational affection. Gilligan (1982), as a result of earlier research, similarly concludes that females value connectedness to others and tend to avoid acting in ways that threaten relationships.

In a related study, Snyder and Miene (1994) examined the relationship between attitudes towards one's own aging and the stereotyping of older adults. Findings from this study reveal possible differences in the mental representations of aging held by men and women. More specifically, investigators found that males held more positive images of growing old than females in the study did.

While each of the above mentioned studies (Silverstein et al., 1995; Snyder & Miene, 1994) emphasizes a unique gender difference in age-related attitudes, reviews of the literature on attitudes toward older adults specifically have found inconsistent, or no gender effects (Chasteen, 2000) or mixed findings only (Tanksley, 1995).

Recent studies, for example, have shown that females (a) are more likely to be interested in aging than males (Gorelik et al., 2000), (b) choose a career working with older adults (Robert & Mosher-Ashley, 2000), (c) have negative attitudes toward older adults (Nation, 1997), (d) tend to be less ageist in regards to age preferences of service providers (Kalavar, 2000), and (e) have positive perceptions about the young-old, old-old, and centenarians (Hawkins, 1996). In contrast, Robak, Griffin, Lacombe, and Quint (2000) report finding no significant gender differences in regards to attitudes toward aging.

#### Perceiver's Age

Age, like the dimensions race and gender, is an important cultural factor. It also overlays the aging process (Holmes & Holmes, 1995) and potentially influences attitudes. In regards to ageism, the age of the perceiver, just like the age of the older person being perceived, may be relevant. Research, however, has provided conflicting evidence regarding the effect of perceiver's age on attitudes toward older adults (Massino, 1993).

In a study investigating perceiver age differences, Celejewski and Dion (1998) examined the self-perceptions of both young (i.e., an average age of 19.6 years) and old adults (an average of 72.69 years) regarding their own aging. Young and old adults' perceptions about three different age groups (i.e., the

young, middle-aged, elderly) also were assessed. Ultimately, statistical results revealed an in-group bias among subjects in the evaluation of older adults. More specifically, investigators found that older adult subjects evaluated older adults more favorably than did their younger adult counterparts.

Results suggesting differences between young and older adults' cross-age attitudes have also been found in studies conducted by Chasteen (2000), Kalavar (2001), Massino (1993), Nation (1997), and Robak et al. (2000). Robak et al. (2000), for example, found that perceptions do not necessarily become more positive with age, but do become less negatively biased. Chasteen also found age differences in both attitudes toward older adults and one's attitudes toward their own aging. Identified as two distinct constructs by Chasteen, she did however suggest that a person's attitude toward their own aging plays an important role in their own perception of older adults in general.

Kalavar (2001), studying age attitude differences, has suggested that subjective notions of the young and old change with time. These changes, he contends, are due to changing lifespan developmental processes, life experiences, and increased exposure to people of all ages over time. In contrast, other researchers (Hawkins, 1996; Mosher-Ashley & Ball, 1999; Pettigrew and Tropp, 2000; Sheffler, 1998; Tanksley, 1995) have found perceiver age to be insignificant. In fact, Pettigrew and Tropp (2000) concluded this after completing a large meta-analysis of existing intergroup contact studies.

In a related issue, while some studies have examined the attitudes of individuals at different stages of life, a majority of research on age-related attitude differences toward older adults has been conducted on young and older

adults predominantly (Bailey, 1991; Celejewski & Dion, 1998; Chasteen, 2000; Hale, 1998). Consequently, there are relatively few studies which include in their assessment the perceptions or attitudes of middle-aged adults between the ages of 30 and 60 years. Consequently, much less is known about the attitudes of this particular age cohort group (Chasteen, 2000). Additionally, little is known about the evolution of attitudes toward older adults over time and across life stages (e.g., from young adulthood into middle adulthood).

The question of whether Americans in general hold positive, neutral, or negative attitudes toward the group, older adults also is an issue which is potentially affected by the factor, perceiver age. In effect, most studies reporting negative attitudes toward older adults have been conducted on young adults samples only (Chasteen, 2000). In contrast, studies using older adult samples, in some situations, have reported positive attitudes toward older adults.

Finally, Krosnick and Alwin (1989), in a study on attitude differences between the young and old, found significant empirical evidence supporting the impressionable years hypothesis. This hypothesis holds that late adolescence and early adulthood are stages of life when individuals' are particularly susceptible and open to attitude change (Visser & Krosnick, 1998). In essence, it is during these periods that socializing influences are most likely to have significant lifelong effects on thinking and attitude. Later in life this susceptibility reportedly drops off.

### Summary

In summary, while research generally suggests that a positive association between cross-age contact (and intergroup contact in general) and attitudes

toward older adults exists, the evidence remains inconclusive relative to the specific facilitating conditions which must be present in the intergroup contact situation (or characteristics of the out-group individuals involved) for positive attitude change to occur. In examining the existing literature, Stephan and Stephan (2001) have identified three general context areas from which factors enhancing intergroup attitudes and relations are believed to originate.

*Situational* factors is one group identified by the Stephans. This group consists of all variables related to the contact situation itself. Included in this category are (a) the setting in which the contact occurs, (b) the nature of the interaction between participants (e.g., intimate versus superficial), and (c) the type of tasks involved.

A second identified group is *person* factors. These factors have to do with the contact participants themselves. More specifically, this category includes (a) the demographic characteristics of the individuals interacting with each other (e.g., socioeconomic status, gender, race), (b) personality traits, and (c) the attitudes and beliefs brought into the contact situation by each interacting individual.

*Societal* factors is a third group. This group includes those factors associated with the structure of a society. Included in this group are (a) the hierarchical arrangement of the power, race, gender, and religion of society at the time, and (b) the historical relations of the out-groups.

Factors related to the general context areas identified here have been selected for examination in this study. Each is investigated relative to their usefulness as a predictor of cross-age attitudes and degree of association with

attitudes toward older adults in general. Factors examined and considered *person-related* include the perceiver's age, race, gender, and time spent living in a household with an older adult age 65 years or older. Factors examined which are *situation-related* include the level of relationship *intimacy* (i.e. an aspect of quality of contact) experienced by a young adult in their relationship with the individual they identify as the "most familiar" older adult in their life, and the quantity of contact occurring in that same relationship.



## CHAPTER 3 METHODOLOGY

### Statement of Purpose

The purpose of this study is to examine the influence of seven different contact-related variables on *young adulthood*-aged college students' (i.e., ages 18 to 35 years) attitudes toward older adults in general (i.e., all individuals age 65 year or older). Of major interest, is how attitudes toward older adults are influenced by (a) a young adult's relationship with, and attitudes toward, a "most familiar" older adult age 65 or older in his/her life, and (b) the level of social intimacy experienced with that same individual. Also examined is the influence of relationship intimacy and contact type on a young adult's attitudes toward the "most familiar" older adult in his/her life.

In this study, three of the independent variables examined are situation-based in nature. This includes a young adult's (a) attitudes toward the "most familiar", (b) the level of intimacy experienced by the young adult in his/her relationship with a "most familiar", and (c) the frequency or quantity of contact with a "most familiar". Specifically, *situational* variables relate to aspects of a contact situation itself.

Four other independent variables examined are person-related. Included among this group are a young adult's (a) gender, (b) race, (c) age, and (d) total time he/she has spent co-residing with an older adult age 65 or older. By definition, *person* variables pertain to aspects of the individuals involved in a

specific contact situation. Variables included in this category are personality traits, demographics, and personal experience (Stephan, 1999).

In this chapter the research hypotheses, relevant variables, data analysis, population, sampling procedures, and data collection are identified and described. Additionally, instrumentation and methodology are discussed.

### Hypotheses

In this study the following null hypotheses were evaluated:

Ho(1): There is no significant association between a young adult's attitudes toward a "most familiar" older adult and his/her attitudes toward older adults in general.

Ho(2): There is no significant association between the frequency of contact (i.e., a measure of quantity of contact) experienced by a young adult in a relationship with a "most familiar" older adult and his/her attitudes toward older adults in general.

Ho(3): There is no significant association between the social intimacy experienced by a young adult in his/her relationship with a "most familiar" older adult and his/her attitudes toward older adults in general.

Ho(4): There is no significant association between a young adult's gender and his/her attitudes toward older adults in general.

Ho(5): There is no significant association between a young adult's race and his/her attitudes toward older adults in general.

Ho(6): There is no significant association between a young adult's age and his/her attitudes toward older adults in general.

Ho(7): There is no significant association between the total amount of time a young adult has spent co-residing in a household that an older adult (i.e., age 65 years or older) also lives and his/her attitudes toward older adults in general.

Ho(8): There is no significant association between the degree of social intimacy experienced by a young adult in a relationship with a "most familiar" older adult and his/her attitudes toward that specific older adult.

Ho(9): There is no significant relationship between the combination of intimacy (an aspect of quality of contact) and contact frequency (an aspect

of quantity of contact) occurring in a young adult/"most familiar" older adult relationship and the young adult's attitudes toward a "most familiar" older adult.

### Design of the Study

This study utilized a survey research design which required participants to complete a survey/questionnaire which included two self-report instruments and a demographic questionnaire. One of these two instruments, the Aging Semantic Differential (Rosencranz & McNevin, 1969), was administered to all the respondents twice; once to assess a respondent's attitudes toward the individual he/she perceives as being the "*most familiar*" older adult in their life, and a second time to assess his/her attitudes toward *older adults in general* (i.e., age 65 years or older).

The Miller Social Intimacy Scale (Miller & Lefcourt, 1982), a second instrument, was used to measure the independent variable, *social intimacy* (i.e., friendship) as it applied to a respondent's experience in his/her relationship with a "most familiar" older adult.

Demographic questions were also included in the survey. These provided investigators with pertinent data about (a) the respondent's contact and experience with older adults in general, (b) the older individual identified by each young adult respondent as the "most familiar", and (c) the intergenerational relationship ultimately shared by the young adult and "most familiar".

### Delineation of Relevant Variables

#### Dependent Variable

The primary dependent variable in the study, *attitudes toward older adults in general*, is defined as "perceptual predispositions" (Rosencranz & McNevin,

1969, p. 55) and stereotypical attitudes that individuals of one age cohort group may maintain toward the cohort group, older adults in general (i.e., age 65 years or older). Negative stereotypical attitudes toward older adults typically are associated with popular myths about aging and older adults, and continue to be prominent in society. "Most older adults are senile", "most older adults are in poor health", "older workers are less productive than younger ones", are all examples of such myths (Kart, 1997). In addition, these myths are perceived as both a cause and result of the social problem *ageism*.

*Ageism*, describes the prejudicial process of stereotyping and discriminating against older adults on the basis of age only. Ageism has been shown to be prevalent within societal areas such as culture, language, mass media and consumerism, physical appearance and public image, values, employment, and health care (Wilkinson & Ferraro, 2002).

For this study, the 32-item self-report instrument, the Aging Semantic Differential (Rosencranz & McNevin, 1969), was used to measure the attitudes of young adult college students (between 18 and 35 years of age) toward the group, older adults in general. The Aging Semantic Differential (ASD) has been recognized as being one of the most widely-used assessment tools in attitude testing (Lutsky, 1980). It is also an instrument that is considered applicable, useful, sufficiently reliable, and valid for use in research (Finnerty-Fried, 1982).

For two of the study's hypotheses, the variable, *attitudes toward a "most familiar" older adult*, was utilized as an outcome variable. This enabled investigators to examine the more direct influence that contact and intimacy, in terms of attitudes, may have on a *specific* relationship, not just a *general* one

like, older adult in general. In each case, attitudes toward the "most familiar"--the dependent variable--was measured using the MSIS.

### Independent Variables

In this study, a total of seven independent variables were examined. Two standardized self-report survey instruments, and a demographic questionnaire designed specifically for this study were used to assess the variables.

Rosencranz & McNevin's (1969) ASD was used in assessing the primary dependent variable, attitude toward older adults in general.

The ASD was also used a second time in the survey. This time it was used to measure the young adult respondent's attitudes toward the "most familiar" older adult. In designing and producing the surveys, investigators staggered the order of these two assessments from one copy of the survey to the next and distributed them randomly to the participants. Ultimately, this was done in order to help control for bias which may occur as a result of the instrument order. A Form A version of the survey--given to about half of the sample--required respondents to rate older adults in general first, and the "most familiar" adult, second. Conversely, those using a Form B version, rated the "most familiar" older adult first, and older adults in general second. Another dependent variable, *intimacy* (as it was experienced by the young adult respondent in his/her intergenerational relationship with the "most familiar"), was assessed using the MSIS (Miller & Lefcourt, 1982). In each form type it was placed between both attitude older adult assessments.

Data about five other variables (i.e., the frequency of contact with a "most familiar" older adult, as well as a young adult's gender, race, age, and the

total amount of time he/she spent co-residing with an older adult) was obtained using demographic questions also included in the survey.

#### Attitude toward a "most familiar" older adult

A "most familiar" older adult, for the purpose of this study, is a family member or unrelated person age 65 years or older whom a young adult study participant reports having had a close bond with (Boon & Brussoni, 1996). The selection of the "most familiar" older adult, as respondents were instructed beforehand, was to be made on the basis of his/her greatest familiarity with an older person age 65 years or older.

In this study, attitudes toward a "most familiar" older adult were measured using the ASD scale designed by Rosencranz and McNevin (1969). Using the ASD, each respondent provided investigators with information about his/her perceptions and attitudes toward the one specific older adult in their life with whom they had the closest, most caring, most mutually-understanding, or most validating relationship (Benner & Hill, 1999).

In completing the survey, respondents were asked to complete the ASD a second time. This time they were instructed to provide information about the perceptions of, and attitudes toward, the broader group, older adults in general.

#### Social intimacy

Intimacy, in general, is considered an essential condition of successful intergroup contact (Amir, 1976). It is also viewed as being a process between two individuals that is characterized by positive, interdependent, and ego involving relations (Amir, 1994). Intimacy is also conceptualized as a relationship process between individuals that is characterized by the sharing of personal

feelings and information. This condition also includes the mutual perception of feeling understood, validated, and cared for by another (Benner & Hill, 1999; Reis & Patrick, 1996). It is these latter three factors, according to Reis and Patrick (1996), which distinguish intimacy from the closely-related construct, *closeness*. It has been argued that while the two terms frequently are used interchangeably, they actually represent two distinct constructs and are not synonymous.

Schaefer and Olson (1981) have identified seven different types of intimacy: (a) sexual, (b) recreational, (c) emotional, (d) intellectual, (e) spiritual, (f) aesthetic, and (e) social. More specifically, the latter, social intimacy is conceptualized as a relationship process that involves the experience of having friendships, and similarities in social networks.

In this study, social intimacy is used as an aspect of the quality of contact. Schwartz and Simmons (2001) have equated contact quality with contact favorability. They contend that all conditions under which contact between out-groups leads to improved attitudes toward out-group members can be collapsed into the single condition, contact quality.

According to Stephan & Stephan (2000), it is quality of contact (i.e., positive or negative contact), not quantity, that most strongly affects the feelings of threat between out-group members. Ultimately, it is these feelings of threat that contribute to the negative feelings out-group members hold toward each other. In essence, the greater the frequency of positive versus negative contacts (e.g., disagreements, fights, losing team efforts, unpleasant interactions between groups), the lower the threat between group members will be.

In this study, the MSIS (Miller & Lefcourt, 1982) was used to measure the degree of social intimacy (i.e., an aspect of contact quality) experienced by a young adult respondent in their relationship with an older individual he/she perceives as being the "most familiar". This self-report survey instrument specifically measures the frequency and intensity of social intimacy experienced in any close relationship. Specifically, the MSIS was designed to measure the degree of interpersonal closeness occurring in any dyadic relationship (e.g., friendships, marriages) regardless of its sexual composition (Downs & Hillje, 1991).

#### Frequency of contact

*Quantity of contact* is the amount or frequency of contact that takes place between individuals in a relationship (Gorelik et al., 2000). Historically, contact has been measured in terms of the quantity or frequency of one's interactions with another only (Brubaker & Powers, 1976). Findings from studies utilizing this unidimensional conceptualization of contact have been mixed and inconclusive (Massino, 1993). Knox et al. (1986) criticized the reliance of previous researchers conducting studies in the area of attitudes toward older adults on their over-emphasis of the quantitative aspects of contact.

In this study, quantity of contact is measured using one question specifically assessing the frequency of contact typically occurring between a young adult respondent and the "most familiar" older adult in his/her life. Specifically, respondents were asked to estimate over a typical one month (i.e., 30 days) period, how many days contact he/she typically has (i.e., either face-to-face, telephone, or written/e-mail contact) with the "most familiar".



Person-related factors: gender, race, and age

Stephan (1999), in an updated model of contact theory, propose that person factors are major contributors in the development of one's intergroup attitudes. Included among this group of factors are the specific demographic characteristics (e.g., gender, race, age) of the individuals in any interpersonal contact situation.

In this study, demographic questions (see Appendix B) were used to gather data about a young adult respondent and his/her experience with older adults in general. Data about the "most familiar" older adult, and the intergenerational relationship shared by the two, was also collected.

Specific demographic information obtained included the young adult's gender, race, age, the type of educational institution he/she is attending, the highest level of education achieved by his/her parents, the nature of his/her relationship with the "most familiar", the most familiar's gender, the frequency of contact (expressed in days/30 day period) between the young adult and "most familiar", the length of relationship between the two (expressed in years), and the total amount of time spent by the respondent living in the same household as an older adult (i.e., this includes the "most familiar" and/or any others age 65 years or older whom the young adult may have lived with at some point in their lifetime).

Total amount of time spent co-residing with an older adult

Experience with older adults, in general, is posited as a variable that can positively influence attitudes toward older adults and reduce stereotyping (Shoemaker & Rowland, 1993). Mosher-Ashley and Ball (1999), in a survey study

of 119 undergraduates, used a Mann Whitney U test of the only 5 students out of 119 in their study who reported having lived in the same household with an older adult. Based on such a very limited sample, they determined that living with an older adult was insignificant in regards to their attitudes toward older adults in general.

In this study, respondents were asked whether or not they had ever lived in the same household as older adult. In a second question, respondents were asked to report the total amount of time, if at all, he or she had spent co-residing.

### Population

The population for sample is college students in *early adulthood* (i.e., between the ages of 18 and 35). To be included in the sample, a young adult also had to be currently enrolled in a Jacksonville, Florida, four-year university (i.e., the University of North Florida) or two-year community college (i.e., the Florida Community College of Jacksonville).

Jacksonville is the third largest city in Florida--and the fourteenth largest nationally--with more than 1 million residents living within the metropolitan area. Of these, 61.7% are White, 27.8% Black or African-American, 4.1% Hispanic, and 2.8% Asian or Pacific Islanders. About 10.5% of all residents are age 65 or over. Of Jacksonville's residents age 25 years or older, 21.9% have a bachelors degree or higher.

In comparison, nationally 62.6% of all U.S. residents are White, 12.3% Black or African-American, 12.5% Hispanic, and 3.7% Asian or Pacific Islander. In addition, 12.4% of all U.S. residents are age 65 years or older. Regarding

educational achievement, 24.4% of all U.S. residents age 25 years or older have a bachelor's degree or higher (U.S. Census Bureau, 2000).

The University of North Florida (UNF) is an undergraduate and graduate institution having an enrollment of 13,596 full and part-time students. The average age of all students attending UNF is 25.5 years. The campus is located on the outskirts of Jacksonville's downtown area. It has a student body comprised of 76.8% Whites, 10.3% Blacks or African-Americans, 4.7% Hispanics, and 5.2% Asian or Pacific Islanders (University of North Florida Office of Institutional Research, 2002)

Florida Community College at Jacksonville (FCCJ), is a two-year community college awarding more than 58,000 degrees to local students in 2001-2002. FCCJ has five separate campuses located throughout the Jacksonville metropolitan area. The average age of all FCCJ students is 27 years. Thirty three percent of all students attending FCCJ are full-time and 37% of the total student body is minority. Included are 58% Whites, 16.2% Blacks or African-Americans, 17.9% Hispanics, and 2.6% Asian or Pacific Islander (Florida Community College System, 2003).

Carter and McGoldrick (1998), in their family life cycle model, conceptualize early adulthood as being a life stage that occurs between the ages of 18 and 35 years. In addition, they characterize *middle adulthood*, which begins at age 36, as a time when the "caretaking of older family members" (p. 38) is a key task. In support of this, a national survey of caregivers found that the average age of all caregivers in the U.S. is 46 (National Alliance for Caregiving & American Association of Retired Persons [AARP], 1997). Survey

findings also indicate that nearly 50% of all caregivers in the U.S. are between the early adulthood age of 30 and middle adulthood age of 55.

In contrast to Carter and McGoldrick's model, Levinson (1986), in his life stages model, proposes that all individuals transition into early adulthood at some point between the ages of 17 and 21. Combining aspects from both of these models, young adulthood for the purpose of this study was operationalized as being a stage of life occurring between the ages of 18 and 35 years of age.

In short, this cohort group was selected specifically to be a focus of this study because of (a) research findings indicating dramatic increases in the demand for family caregiving support and services in the U.S. extending well into the early 2030s (Laditka & Laditka, 2001), and (b) the relatively limited amount of research that has been produced in this area using perceiver age as a factor. Ultimately, in the 2030s, it will be today's young adults who will be counted on to be the primary caregivers to the growing population of frail old in the U.S.

#### Sampling Procedures

A sample of convenience consisting of *young adulthood*-aged college students between the ages of 18 and 35 years was used in this study. To qualify for inclusion in the sample, individuals had to be enrolled in either UNF or FCCJ at the time. Both of these are institutions of higher education are located in the Jacksonville, Florida, area. Because of the inherent difficulties of securing a random sample of young adults age 18 to 35, networking sampling techniques were used to solicit potential participants for the study. Ultimately, study participants were recruited from the group of students enrolled in college general

education classes (e.g., introduction to sociology, introduction to psychology) or graduate classes being offered by UNF and FCCJ at the time.

Before starting the recruitment process, Institutional Review Board (IRB) approval for the study was obtained. In compliance with IRB protocol, all potential study participants in classes were informed, before the fact, of any potential risk factors or benefits that they may incur as a result of their participation in the study. They were also informed that no compensation for their participation was being offered. Participants were also instructed how to secure study results at a later date, should they want to. All participants were asked to read, sign, and voluntarily return an informed consent form prior to their completion of the 7-page study survey required for the study. To ensure anonymity, informed signed consent forms were collected separately from completed questionnaires.

In recruiting student participants, permission was first sought and received from instructors to visit their classrooms and invite students to voluntarily participate in a study on interpersonal attitudes. In the classroom, students received a brief oral introduction about the study and were given a copy of the study's informed consent (see Appendix A) to read prior to deciding whether to participate. Those agreeing to participate by signing a consent form were then provided ample time in class to complete the 15 to 30 minute survey.

Those students, completing the survey but not meeting the study's age criteria (i.e., young adults ages 18 to 35 only) were later excluded from the study sample in a delimitation process. Students, not completing the entire survey or completing it improperly, also were excluded from the final sample. Surveys from

respondents answering the survey's race question by marking "other", were also to be excluded from the sample, however no responses of this type were received.

### Instrumentation

#### Aging Semantic Differential (ASD)

The Aging Semantic Differential (ASD) (Rosencranz & McNevin, 1969) is a 32-item standardized instrument measuring age discrimination and stereotypic attitudes toward older adults. In a review of the research on attitudes toward older adults, Lutsky (1980) found that 60 percent of all studies used formal attitude assessment scales. Of this group, 20 percent reportedly used the ASD. This makes the ASD, which is frequently used in educational and in applied settings, one of the most widely-used assessment tools in attitude testing. In addition, Finnerty-Fried (1982), in a review and appraisal of instruments assessing attitudes toward older adults, has reported that the ASD as a research tool is "applicable", "useful", and "sufficiently valid and reliable" (p. 207) even when used with more complex research. Others, such as Knox, Gekoski, and Kelly (1995), in comparing the ASD to other popular assessment instruments, favor the ASD because of its multidimensionality, brevity, positive to negative response range, and flexibility in regards to target specification.

In essence, the development of the ASD is the result of the pre-testing of individual adjective scales and the subsequent factor analysis of such data and results. Essentially, all ASD items were initially derived from the administering of a semantic differential scale comprised of numerous bi-polar adjective pairs to 200 college students (Rosencranz & McNevin, 1969). Participants in this study

were asked to use the adjective pairs to evaluate individuals of different ages. Initially, Rosencranz and McNevin started with a much broader list of adjective pairs that included 50 that had been previously identified by Osgood, Suci, and Tannenbaum (1957). Additional pairs were also added to the list. This was achieved by asking individuals of different ages to identify bi-polar adjective pairs that are descriptive of attributes and behavioral characteristics of individuals of all ages. As a result of factor analysis, however, the number of items included in the ASD was reduced to its final form consisting of 32 adjective pairs in a 7-point Likert scale format. Examples of adjective pairs included in the ASD are (a) Progressive-Old Fashioned, (b) Productive-Unproductive, (c) Healthy-Unhealthy, and (d) Happy-Sad.

In regards to the scoring of the ASD, overall attitude scores are determined by adding the 32 responses, with a range of scores between 32 and 224. A score of 128 on the ASD is considered to be neutral. Individual item scores range from 1 to 7 for each pair with lower scores reflecting more positive attitudes toward older adults (Massino, 1993). Derived from the semantic differential tradition of Osgood, Suci, and Tannenbaum (1957), the ASD, because of the semantic differential technique utilized, avoids the problem of confounding statements used in other types of instruments for measuring attitudes (Intrieri, Eye, & Kelly, 1995).

Celejewski and Dion (1998), in a study investigating the perceptions of various age groups, performed a reliability analysis on the ASD for each age category/target stimulus condition. Their analyses yielded alpha coefficients that ranged from .83 (self now) to a high of .92 (elderly woman). Mean inter-item

correlations ranged from .14 (self now) to .28 (elderly woman) also. And, when correlation coefficients were computed for each pair of subscales and each target, the value of  $r$  ranged from .4 to .8.

Massino (1993), using the ASD to rate attitudes toward the elderly specifically, also reported "high internal consistency reliability" (p. 69) for the ASD with a Cronbach's alpha of .90 ( $N = 249$ ). Item-to-total correlation values ranged from .17 to .68, with a mean correlation of .53. Construct validity was also established. Pearson product moment correlations between total scores on the ASD and scores on related measures including (a) the preference to work with the elderly ( $r = .15$ ,  $p < .01$ ), and (b) the Social Value of Elderly (SVE) subscale of the Aging Opinion Survey ( $r = -.29$ ,  $p < .001$ ) supported this.

Initially developed for use in judging the perceptions and attitudes of any individual toward an individual who is aged, the use of the ASD has since been modified for some studies to include using groups of older adults as targets. More recently, the ASD has been used effectively in assessing the attitudes of subjects from various age groups toward social object groups such as *most old people*, *persons over 65 years of age*, *typical adults over age 65*, and *the average non-institutionalized elderly person*. Thus, even when used with general social objects, the ASD retains its potency for measuring attitudes toward older adults (Intrieri et al., 1995).

In this study, the ASD has been used to assess both the young adult subject's (a) attitudes toward a specific social object (i.e., the "most familiar" older adult), and (b) attitudes toward a more-generalized aged-related social object (i.e., the group, older adults in general). Consequently, each participant in the



study was required to complete the ASD twice; once regarding their attitudes toward the "most familiar" older adult in their life, and once regarding attitudes they hold toward the group, older adults in general.

#### Miller Social Intimacy Scale (MSIS)

The Miller Social Intimacy Scale is a 17-item Likert-style self-report survey instrument using a revised 5-point response format (Miller & Lefcourt, 1982). MSIS responses range from very rarely to almost always (Touliatos, Perlmutter, & Strauss, 1990). The MSIS is designed to measure social intimacy in "any intimate adult relationship regardless of its sex composition" (Downs & Hillje, 1991, p. 991). Social intimacy, for the purpose of this instrument, is conceptualized as interpersonal closeness (Miller & Lefcourt, 1982). Social intimacy is also identified by Schaefer and Olson (1981) as one of seven possible types of relationship intimacy that can develop. The six others are, emotional, intellectual, sexual, recreational, spiritual, and aesthetic.

Construction of the MSIS started with an initial item pool of 30 questions generated from a series of systematic interviews conducted with 22 male and 28 female undergraduates (Miller & Lefcourt, 1982). The purpose of the interviews was to explore the characteristics and nature of students' relationships with close friends, family, and acquaintances. As a result, defining characteristics of relationships which students considered intimate were identified. Student descriptions of the characteristics of their close relationships in terms of frequency and depth subsequently led to the development of the MSIS. In its final form it consists of a 6-item subscale measuring the amount and frequency of intimate contact (i.e., measuring quantity of contact) and 11-item subscale

measuring intimacy depth (i.e., measuring quality of contact). Essentially, in the end, "all 17 intimacy items (6 requiring *frequency* and 11 requiring *intensity* ratings) were selected on the basis of both high inter-item and item-total correlations (greater than .50)" (Miller & Lefcourt, 1982, p. 516).

Initially, the MSIS was normed by Miller and Lefcourt (1982) on a sample of 252 subjects. This sample consisted of both married and unmarried male and female students. Included in the sample was a sub-sample of married clinic subjects whose average age was 36.3 years.

Validity and reliability studies (Downs & Hillje, 1991; Miller & Lefcourt, 1982) have shown the MSIS to have "excellent internal consistency" (Corcoran & Fischer, 2000, p. 469) with alphas of .86 and .91 in two samples. The MSIS also is "extremely stable" (Corcoran and Fischer, 2000, p. 469) as evidenced by a two-month test-retest reliability correlation of .96 and one-month correlation of .84 (Miller & Lefcourt, 1982). Construct validity, convergent validity, and discriminant validity have also been established for the MSIS (Miller & Lefcourt, 1982). Good known-groups validity has been established as evidenced by the ability of the MSIS to significantly distinguish degrees of intimacy between (a) couples seeking marital therapy versus those who are not, (b) married and unmarried students, and (c) descriptions of closest friends versus casual friends. Discriminant validity has been established with the positive correlation of scores on the MSIS to same subject scores on other established standardized scales including (a) the Fitts' Tennessee Self-Concept Scale, a measure of self-esteem; (b) Jackson's Personality Research Form; and (c) the Marlowe-Crown Need for Approval Scale (Corcoran & Fischer, 2000; Miller & Lefcourt, 1982). In

establishing convergent validity, subjects describing their closest relationships as having high levels of intimacy and trust (i.e., as reflected by their scores on the 52-item Interpersonal Relationship Scale) also scored high on the MSIS ( $r = .71$ ,  $p < .001$ ). Conversely, subjects describing themselves as lonely on the UCLA Loneliness Scale also scored low on the MSIS ( $r = -.65$ ,  $p < .001$ ) (Miller & Lefcourt, 1982).

Cournoyer and Mahalik (1995), using the MSIS in a cross-sectional study examining gender role conflict in adult men, found alphas of .93 for college aged men and .92 for middle-aged men. In addition, Downs and Hillje (1991), in a reassessment of the MSIS and its usefulness with both mixed- or same-sex dyads found high Cronbach coefficient alphas (.87 to .95) for all four possible rater/intimate dyad combinations (i.e., male rater and his female intimate, male rater and his female intimate, female rater and her female intimate, and female rater and her male intimate).

Administration time for the MSIS is approximately 5 to 10 minutes. Examples of MSIS questions assessing social intimacy include, "How important is it to you that he/she understands your feelings?", and "How often do you confide very personal information to him or her?" (Corcoran & Fischer, 2000, pp. 470-471).

In sum, the MSIS has been determined to be a "reliable and valid measure of social intimacy" (Miller & Lefcourt, 1982, p. 518) which is appropriate for use in the study of all friendships and other dyads regardless of their sexual composition (Downs & Hillje, 1991, p. 991).

### Demographic Questionnaire

A brief questionnaire (see Appendix B) was used to collect additional information about a young adult's (a) characteristics and demographics, (b) the person he/she identified as being the "most familiar" older adult in his/her life, and (c) the relationship the two shared.

Specific information was also obtained about the gender, race, and age of the young adult, as well as frequency and type of contact they may have had with the "most familiar" older adult. Other information gathered included the type of educational institution the young adult was attending (i.e., community college or four-year university), the educational achievement of his/her parents, the basis of the young adult's relationship with the "most familiar" older adult (e.g., grandparent, friend), the "most familiar" older adult's gender, and the total time the young adult spent living in the same household as an older adult. The questionnaire also included an open-ended question about the participant's attitudes toward older adults.

### Data Analysis

In this study, regression analysis and independent t-tests were used to assess the contribution of seven predictor variables to the attitudes toward older adults held by young adults age 18 to 35. Predictor variables for which data was gathered and analyzed included (a) the adult's attitudes toward the "most familiar" older adult in his/her life, (b) the social intimacy experienced by the young adult in his/her relationship with the "most familiar" older adult, (c) the contact frequency between the two, (d) the perceiving young adult's gender, (e) race, (f) age, and (g) the total time he/she spent living in a household in

which an older adult was also living at the time. Intimacy and contact in the young adult's "most familiar" older adult relationship was also examined in terms of how it related to young adult respondents' attitudes toward the specific "most familiar" older adult.

In this study, regression analysis and independent sample t-tests were used to compare the relationships of various person-related or contact situation-related variables to the dependent variable, attitudes toward older adults as a whole. Regression analysis is a statistical method that allows an individual to study the association between a dependent variable (e.g., attitudes toward older adults) and one or more independent variables (Miller & Salkind, 2002). This type of analysis has enabled the investigator to determine the proportion of variance in the dependent variable that can be explained by predictor variables being examined. In addition, regression analysis allows for the calculation of the proportion of variance in the dependent variable (i.e., attitudes toward older adults) that is accounted for by each of the independent variables when the effect for all of the study's other predictor variables are held constant. Correlation will also be used to examine the variables, relationship intimacy and contact, and their association with a young adult's attitudes toward a "most familiar" older adult.

Independent sample t-testing was used to test for general attitude means differences regarding (a) those who had co-resided with an older adult versus those who had not, (b) respondent gender differences (i.e., males versus females), and respondent race differences (e.g., Whites versus African-Americans). In short, the independent t-test compares the means of two

separate samples (e.g., males versus females) which are typically from randomly assigned groups. While scores should be normally distributed, the t-test is robust and capable of handling violations in this area. Analysis of all data was completed using a Statistical Package for the Social Sciences (SPSS) computer program.

## CHAPTER 4

### DATA ANALYSIS AND RESULTS

The purpose of this study is to examine the influence of seven different contact-related variables on *young adulthood*-aged college students' (i.e., ages 18 to 35 years) attitudes toward older adults in general (i.e., all individuals age 65 year or older).

In this study on ageism, four of the independent variables examined are person-based and focus on aspects of the young adult respondent: (a) his/her *gender*, (b) his/her *age*, (c) his/her *race*, and (d) whether he/she has ever *co-resided with an older adult* in the same household at any time in life (and, if so, for how long).

Three other variables are situation-based and focus on aspects of the relationship contact occurring between a young adult respondent and their "most familiar" older adult. Included are: (a) the *intimacy* (e.g., a measure of quality of contact), experienced by a young adult in his/her relationship with a "most familiar" older adult, (b) the *attitude toward the "most familiar"*, and (c) the *contact frequency* (e.g., a measure of quantity of contact) occurring between the two. Also examined was the influence that *intimacy* with a "most familiar" and *contact* have on a young adult's attitudes toward a specific "most familiar" older adult.

The findings are reported in this chapter and ultimately are organized into five sections. Section one presents a description of the study sample. Section two provides a description of the independent and dependent variables examined

and their assessment. Section three presents the results for the study's nine hypotheses. The fourth section provides additional relevant findings of the study. Finally, in section five overall findings and results are summarized.

### Description of the Sample

A data collection for this study on young adults' attitudes toward older adults was conducted using a survey method and sample of convenience. This ultimately produced a final sample (after delimitation) of 171 *young adulthood*-aged individuals ranging in age from 18 to 35 years.

Prior to a delimitation process, there were 207 young adult college students who had participated in the study and voluntarily completed the survey. Ultimately, however, 17 of these were removed because of their age. Specifically, these 17 fell outside the acceptable age range parameters of *young adulthood* suggested by the life stage models of Carter and McGoldrick (1998) and Levinson (1986). Another 19 participants were eliminated from the sample because of incomplete or incorrectly completed questionnaires (i.e., either a failure to answer all of the instrument items or to complete the instrument as instructed). Table 1 provides an overview of the descriptive data (i.e., frequencies and percentages for gender, age, race, institutional type, and parent education) for the final sample of 171 young adults after delimitation.

The composition by gender of the final sample was 58 males and 113 females. In terms of age, the study's sample included individuals from 18 to 35 years of age (i.e., the range for *young adulthood*), however, 68.4% of all participants were age 18 to 22 years ( $M = 22.81$ ,  $SD = 4.47$ ). Sample composition by race was comprised primarily of Whites (67.3% or 115



Table 1

Sample After Delimitation

Demographic Variable	Frequency (f)	Percentage (%)
<u>Gender</u>		
Male	58	33.9
Female	113	66.1
Total	171	100.0
<u>Age</u>		
18 – 20	66	38.6
21 – 23	51	29.8
24 – 26	21	12.2
27 – 29	13	7.6
30 – 32	10	5.9
33 – 35	10	5.9
Total	171	100.0
<u>Race</u>		
White	115	67.3
African-American/Black	37	21.6
Hispanic	9	5.3
Asian/Pacific Islander	10	5.8
Total	171	100.0
<u>Institution Type</u>		
4-Year University	135	78.9
2-Year Community College	36	21.1
Total	171	100.0
<u>Father's Education</u>		
Graduate Degree	21	12.3
4-Year Degree	45	26.3
Partial College (At Least 1 Year)	38	22.2
High School Graduate	52	30.4
Never Graduated From High School	15	8.8
Total	171	100.0

Table 1 Continued

Demographic Variable	Frequency (f)	Percentage (%)
<u>Mother's Education</u>		
Graduate Degree	22	12.9
4-Year Degree	32	18.7
Partial College (At Least 1 Year)	54	31.6
High School Graduate	50	29.2
Never Graduated From High School	13	7.6
Total	171	100.0

respondents) and African-Americans (21.6% or 37 respondents). Nine respondents identified themselves as Hispanic, and 10 as Asian/Pacific Islander.

Relative to education, all participants in the study were college students who were currently attending either a 2-year community college or 4-year university in Jacksonville, Florida. One hundred thirty five of the participants (or 79% of the sample) were enrolled at the University of North Florida, a 4-year state university. The remaining 36 participants were attending Florida Community College at Jacksonville (FCCJ).

Sample composition, was broken down by the educational achievement of the respondent's parents also. This breakdown revealed that 60.8% of all respondents had fathers who had completed at least 1 year of college. Similarly, 63.2% of all respondents had mothers who had completed at least 1 year of college. The attainment of at least a 4-year degree was one area of discrepancy between the educational achievement of fathers and mothers, however. While 38.6% of fathers had 4-year college degrees, only 31.6% of mothers did. This

data on the respondents' parents is relevant because parent education has been shown to be a positive and powerful predictor of the demographic variable, socioeconomic status (SES). In turn, SES has been shown to be a strong and positive predictor of more positive attitudes (Edwards-Hewitt & Gray, 1995).

### Description of the Variables

The students' *attitudes toward older adults in general* was assessed using the Aging Semantic Differential (Rosencranz & McNevin, 1969), a self-report scale consisting of a list of 32 bipolar adjective pairs in Likert scale format (see Appendix A). Scoring for each item ranges from a low score of 1 (most positive attitude) to a high score of 7 (most negative attitude). A total attitude score is determined by summing the score of all 32 responses. A more positive view of older adults is indicated by a lower score. Total scores on the ASD can range from 32 (the most positive attitude) to 224 (the most negative). A score of 128 on the ASD is considered to be neutral. All scores below 128 represent positive attitudes while scores above 128 represent negative attitude. Table 2 provides an overview of the descriptive data of the study's independent and dependent variables (i.e., attitudes toward older adults in general, attitudes toward a "most familiar", gender, age, race, co-residency, and contact frequency).

Actual scores for the ASD, used in this study's survey to assess attitudes toward older adults in general, ranged from a score of 53 to 186. Accordingly, 64.9% of the sample (111 respondents) responded with scores within the positive attitude range ( $M = 117.02$ ,  $SD = 26.12$ ). Item-total analysis of the sample's responses produced a strong Cronbach's alpha reliability coefficient of .92

Table 2

Independent and Dependent Variable Frequencies and Percentages

Demographic Variable	Frequency (f)	Percentage (%)
<u>Attitudes Toward Older Adults In General</u>		
Positive	111	64.9
Neutral	2	1.2
Negative	58	33.9
Total	171	100.0
<u>Attitudes Toward a "Most Familiar" Older Adult</u>		
Positive	149	87.1
Negative	22	12.9
Total	171	100.0
<u>Gender</u>		
Male	58	33.9
Female	113	66.1
Total	171	100.0
<u>Age</u>		
18 – 20	66	38.6
21 – 23	51	29.8
24 – 26	21	12.2
27 – 29	13	7.6
30 – 32	10	5.9
33 – 35	10	5.9
Total	171	100.0
<u>Race</u>		
White	115	67.3
African-American/Black	37	21.6
Hispanic	9	5.3
Asian/Pacific Islander	10	5.8
Total	171	100.0

Table 2 Continued

Demographic Variable	Frequency (f)	Percentage (%)
<u>Co-Residency With An Older Adult</u>		
Yes	47	27.5
No	124	72.5
Total	171	100.0
<u>Years Spent Co-Residing</u>		
.00 (Never lived with an older adult)	124	72.5
.01 -- 5.00 years	35	20.5
5.01 -- 10.00 years	7	4.1
10.01 -- 15.00 years	3	1.7
15.01 -- 20.00 years	1	.6
20.01+	1	.6
Total	171	100.0
<u>Contact (i.e., Face-To-Face, E-Mail, Letters, Telephone) With "Most Familiar"</u>		
0 days/30 day month	9	5.3
1 - 5 days/30 day month	71	41.4
6 - 10 days/30 day month	32	18.7
11 - 15 days/30 day month	17	10.0
16 - 20 days/30 day month	14	8.2
21 - 25 days/30 day month	14	8.2
26 - 30 days/30 day month	14	8.2
Total	171	100.0

supporting the internal consistency of the ASD for measuring attitudes toward older adults in general.

Within this study, the ASD was used in a second administration to assess the young adult respondent's attitudes toward the specific older adult he/she identified as being the "most familiar". In total, 87.1% of respondents revealed attitudes toward the "most familiar" adult which were positive ( $M = 93.13$ ,  $SD = 29.26$ ). An item-total analysis of these scores on the ASD revealed a

Cronbach's alpha of .92. This represents a strong coefficient in support of the internal consistency of the ASD in measuring the attitudes toward a "most familiar" adult age 65 years or older.

*Intimacy*, another key independent variable in this study, was evaluated using the Miller Social Intimacy Scale (Miller & Lefcourt, 1982) consisting of 17 Likert-style items. The MSIS is designed to measure social intimacy (i.e., friendship) in "any intimate adult relationship regardless of its sex composition" (Downs & Hillje, 1991, p. 991). Scores for each item range from a low of 1 (least intimacy) to 5 (most intimacy). A total intimacy score for the relationship between the young adult respondent and his/her "most familiar" older adult is determined by summing the scores of all 17 item responses. Total scores for the MSIS can range from a score of 17 (the least intimacy) to 85 (the most intimate relationship). Intimacy scores for this study ranged from 23 to 84 ( $M = 61.98$ ,  $SD = 12.96$ ) with higher scores representing perceptions of greater intimacy by the young adult respondent. An item-total analysis produced a strong a Cronbach's alpha of .91 supporting the internal consistency of the MSIS.

In regards to the study's independent variable, *race* (as it applies to the young adults), each respondent was asked in the study survey to identify themselves in terms of a race category he/she "MOST identifies with": (1) White, (2) African-American/Black, (3) Hispanic, (4) Asian/Pacific Islander, or (5) Other. In response, 115 participants (or 67.3% of the sample) identified themselves as White. Another 21.6% of the sample identified themselves as African-American/Black. Nine Hispanic young adults (5.3%) and ten Asian/Pacific Islanders (5.8%) were also included. No study participant responded to the race

question using the "Other" option. In effect, while the percentage breakdown of the sample by race generally approximated that of the student bodies of both UNF and FCCJ, the small number of respondents in the survey identifying themselves as *Hispanic* or *Asian/Pacific Islander* was viewed as being potentially limiting statistically. Because of this, only data from the White and African-American/Black sub-samples ( $n = 152$ ) was used in the statistical analysis determining the relationship between *race* and *attitudes toward older adults in general*.

In regards to the independent variable, *time spent co-residing with an older adult*, 47 participants, or 27.5% of the sample, reported living with an older adult age 65 years or older at sometime in their life. For the entire sample, total time spent co-residing ranged from a low of 0.00 years to 21.67 years ( $M = 1.06$ ,  $SD = 3.01$ ). Data for this variable was gathered using two survey questions. The first question asked respondents if they had ever lived in the same household as an older adult age 65 years or older. A second question asked those who had co-resided for an estimate of the total amount of time in years they had spent living with an older adult.

*Contact frequency* (i.e., an aspect of quantity of contact), another independent variable, was assessed in this study in terms of the typical number of days/month (i.e., 1 month = 30 days) of either face-to-face, written/e-mail, or telephone contact occurring between a young adult and the older adult he/she identified as being the "most familiar". Accordingly, 65.4% of the total sample reported having had between 0 to 10 days of monthly contact with the "most familiar". Nine sample respondents, or 5.3% of the total, reported having 0 days

of contact with the "most familiar". For the entire sample, contact frequency ranged from a low of 0 days/month contact to a high of 30 days/month ( $M = 10.17$ ,  $SD = 9.26$ ).

Young adult *gender* and *age* are two more independent variables for which data was collected from demographic questions included in the study's survey. Table 3 provides data on the means and standard deviations of all of the study's independent and dependent continuous variables.

Each respondent, for the purpose of the study, was required to identify and rate his/her relationship with the older adult in life whom he/she perceives as the "most familiar". This was an important task in the determination of several of the other key variables in the study as well.

Ultimately, 124 of all respondents (72.5% of the sample) identified a "most familiar" older adult who was female (frequently this was a grandmother). This was in contrast to the 47 in the sample identifying "most familiar" males. Nearly

Table 3

Independent and Dependent Continuous Variable Means and Standard Deviations

Variable	Minimum	Maximum	Mean	SD
Attitude Toward Older Adults in General (Primary Dependent Variable)	53.00	186.00	117.01	26.12
Age of Young Adult	18.00	35.00	22.81	4.47
Attitudes Toward The "Most Familiar" Older Adult	32.00	175.00	93.13	29.26



Table 3 Continued

Variable	Minimum	Maximum	Mean	SD
Intimacy With The "Most Familiar"	23.00	84.00	61.98	12.96
Years Co-Residing With An Older Adult	.00	21.67	1.06	3.01
Contact With The "Most Familiar" (i.e., Days/Month of Face-To-Face, Telephone, Letter, or E-Mail Contact)	.00	30.00	10.17	9.26

60% of all respondents selected same gender individuals as their "most familiar". Respondents, in deciding on a "most familiar", predominantly chose relatives over non-family members. In fact, 134 (78.4%) of all of the "most familiar" older adults identified, were grandparents. In contrast, only 11.7% identified non-family "most familiars" (e.g., neighbors, co-workers). Relationship duration between young adults and their "most familiar" ranged from .08 to 35.00 years ( $M = 20.27$ ,  $SD = 6.39$ ). Table 4 provides an overview of the descriptive data regarding young adult/"most familiar" adult relationships.

The analysis of data for this study was accomplished through use of a SPSS 12.0 statistical program. Using correlational analysis methods, intercorrelations for all independent and dependent variables were also computed for the sample.

Table 4

The "Most Familiar" Adult Relationship

Demographic Variable	Frequency (f)	Percentage (%)
<u>Gender of "Most Familiar" Older Adult</u>		
Male	47	27.5
Female	124	72.5
Total	171	100.0
<u>Young Adult/"Most Familiar" Dyad</u>		
Same Gender	102	59.6
Opposite Gender	69	40.4
Total	171	100.0
<u>Relationship With "Most Familiar"</u>		
A Grandparent	134	78.4
Other Relative (Not A Parent)	17	9.9
A Friend	5	2.9
A Neighbor	1	.6
Co-Worker	3	1.8
Other	11	6.4
Total	171	100.0
<u>Years "Most Familiar" Known</u>		
.01 - 5.00	9	5.3
5.01 - 10.00	7	4.1
10.01 - 15.00	8	4.6
15.01 - 20.00	57	33.4
20.01 - 25.00	66	38.6
25.01 - 30.00	14	8.2
30.01 - 35.00	10	5.8
Total	171	100.0

Table 4 Continued

Demographic Variable	Frequency (f)	Percentage (%)
<u>Contact (i.e., Face-To-Face, E-Mail, Letters, Telephone) With "Most Familiar"</u>		
0 days/30 day month	9	5.3
1 - 5 days/30 day month	71	41.4
6 - 10 days/30 day month	32	18.7
11 - 15 days/30 day month	17	10.0
16 - 20 days/30 day month	14	8.2
21 - 25 days/30 day month	14	8.2
26 - 30 days/30 day month	14	8.2
Total	171	100.0

A number of significant correlations among independent and dependent variables were identified. Six Pearson correlation coefficients among the variables were ultimately determined to be significant at the  $p < .01$  level of significance. Of moderate strength was the positive correlational relationship occurring between the dependent variable, a *young adult's attitude toward a "most familiar" older adult*, and his/her broader *attitudes toward older adults in general* ( $r(169) = .430, p < .01$ ). Only slightly weaker in magnitude was the moderate correlation found between the *intimacy* a young adult experiences in his/her relationship with a "most familiar" older adult and the young adult's attitude toward that specific individual ( $r(169) = -.412, p < .01$ ). This Pearson correlation coefficient was found to be negative, however. This is because lower scores on the ASD are indicative of a more *positive* attitude, while lower scores on the MSIS (measuring intimacy) are instead indicative of *lower* levels of intimacy. Contact frequency was also found to be moderately and positively

correlated with *intimacy* ( $r(169) = .385, p < .01$ ). Related to this, was a significant but weaker correlational relationship that was found between contact frequency with the "most familiar" and the young adult's attitude toward the same specific individual ( $r(169) = -.208$ ). This correlation, like the earlier identified negative correlation, was negative only because of the opposite scoring techniques inherent in the two different instruments used in measuring these variables.

Several other correlations were found to be significant at a .05 level. Most prominent among this group was the correlation between the independent variable, *intimacy* and the dependent variable, *attitudes toward older adult in general* ( $r(169) = -.190$ ). Again, scoring differences between the two instruments used to measure these variables is the determining factor explaining the negative direction of this correlation. A positive correlation also was found between the factors, *gender* (i.e., SEX) and *intimacy* as it takes place in a young adult's relationship with a "most familiar" older adult ( $r(169) = .178$ ). All of the discussed Pearson correlation coefficients are displayed in Table 5.

Because of potential problems statistically presented by a skewed distribution of the sample by race, it was decided in the study to use only data from the White and African-American/Black respondent groups in conducting a statistical analysis to determine the relationship between *race* and *attitudes toward older adults in general*. The correlation between these two variables (using an adjusted  $n$  of 152 representing the total number of White and African-American/Black respondents only in the sample) proved to be weak but significant at the .05 level ( $r(150) = -.165$ ). Additionally, significance at a .05 level was found ( $r(150) = .183$ ) when correlating race (Whites and African-

American/Blacks only) with years having co-resided with an older adult.

Significance at a .01 level was found ( $r(150) = .247$ ) when correlating race and with the accumulative education of both of the young adult's parents.

Table 5

Variable Intercorrelations

Variable	1	2	3	4	5	6	7	8	9
1. GAT	1								
2. MFAT	.430**	1							
3. INTI	-.190*	-.412**	1						
4. SEX	.037	-.021	.178*	1					
5. RAC	-.165*	.099	-.066	.133	1				
6. AGE	-.135	.106	-.123	-.047	.369**	1			
7. COR	-.056	.070	.151*	.026	.088	.044	1		
8. CORY	-.026	.137	.048	.019	.183	.112	.573**	1	
9. CON	-.083	-.208**	.385**	.092	.092	-.018	.189*	.177*	1

\*  $p < .05$  (2-tailed); \*\*  $p < .01$  (2-tailed);  $N = 171$

Note: GAT = attitudes toward older adults in general; MFAT = attitudes toward "most familiar"; INTI = relationship' social intimacy; SEX = young adult's gender; RAC = race (152 Whites and Black/African-Americans in sample only); AGE = young adult's age; COR = co-residency; CORY = years co-residing; CON = frequency of contact.

Hypothesis Testing

Nine hypotheses were evaluated in order to test the assumptions of this study. Specifically, investigators examined the associations between attitudes toward older adults and various person-based factors and situation-based factors common to an intergenerational contact situation. The hypotheses were analyzed

through the use of simple regression analysis or independent sample t-tests.

Results of the analyses are described in the following paragraphs. For purposes of statistical significance a Type I error rate of .05 was established.

Hypothesis 1 stated that there is no significant association between a young adult's attitudes toward a "most familiar" older adult and his/her attitudes toward older adults in general (i.e., the null hypothesis). The results of a simple regression analysis demonstrated that there was a statistically significant association between attitudes toward a specific "most familiar" older adult and attitudes toward older adults in general. A prediction equation of  $\text{GENATTITUDES SCORE} = 81.289 + .384(\text{MFAM ATTITUDES SCORE})$  was obtained. Based on this statistical evidence, the null hypothesis was rejected. Table 6 shows the ANOVA summary table from the statistical analysis indicating significance at the .001 level.

Hypothesis 2 stated that there is no significant association between the frequency of contact occurring between a young adult and his/her "most familiar" older adult in life and the same young adult's attitudes toward older adults in

Table 6

ANOVA (Hypothesis 1)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	21425.763	1	21425.763	38.289	.000a
Residual	94569.184	169	559.581		
Total	115994.95	170			

a. Predictors (Constant), most familiar attitude score

b. Dependent Variable: general attitude score

general (i.e., the null hypothesis). The results of a simple regression analysis demonstrated that there was no statistically significant association between frequency of contact and attitudes toward older adults in general. Therefore, based on the lack of significant statistical evidence the null hypothesis was not rejected. Table 7 shows the ANOVA summary table for Hypothesis 2 indicating no significance at a .05 level.

Table 7

ANOVA (Hypothesis 2)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	800.192	1	800.192	1.174	.280a
Residual	115194.75	169	681.626		
Total	115994.95	170			

a. Predictors (Constant), frequency of contact with the "most familiar"

b. Dependent Variable: general attitude score

Hypothesis 3 stated that there is no significant association between intimacy experienced by a young adult in his/her relationship with a "most familiar" older adult and the young adult's attitudes toward older adults in general (i.e., the null hypothesis). The results of a simple regression analysis demonstrated that there was a statistically significant association between social intimacy and attitudes toward older adults in general. A prediction equation of  $\text{GENATTITUDES SCORE} = 140.782 - .383(\text{MFAM INTIMACY SCORE})$  was obtained. Based on the significant statistical evidence the null hypothesis was rejected. Table 8 shows the ANOVA summary table for Hypothesis 3 indicating significance at a .05 level.

Table 8

ANOVA (Hypothesis 3)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4196.311	1	4196.311	6.343	.013a
Residual	111798.64	169	661.530		
Total	115994.95	170			

a. Predictors (Constant), the young adult's intimacy with the "most familiar"

b. Dependent Variable: general attitude score

Hypothesis 4 stated that there is no significant association between a young adult's gender and his/her attitudes toward older adults in general (i.e., the null hypothesis). An independent samples t-test was calculated comparing the mean general attitude scores of males in the study to the mean scores of females. No significant differences between the two was found ( $t = -.488$ ,  $df = 169$ ,  $p = .627$ ). The mean general attitudes scores of males ( $M = 115.66$ ,  $SD = 3.39$ ) was not significantly different from the mean general attitudes score of female study participants ( $M = 117.72$ ,  $SD = 26.36$ ). An initial Levene's Test for Equality of Variances proved to be not significant. Therefore equal variances were assumed in conducting the t-test. Table 9 shows results of the independent samples t-test indicating no significance at a .05 alpha level.

Table 9

Independent Samples T-Test for the Equality of Means (Hypothesis 4)

		t	df	Sig. (2-tailed)	Mean Difference
General Attitudes	Equal Variances Assumed	-.488	169	.627	-2.06164



Hypothesis 5 stated that there is no significant association between a young adult's race and his/her attitudes toward older adults in general (i.e., the null hypothesis). Because of a small number of respondents for both the Hispanic ( $n = 9$ ) and Asian/Pacific Islander ( $n = 10$ ) sub-samples a decision was made to compare only the White ( $n = 115$ ) and Black/African-American ( $n = 37$ ) sub-samples in testing for the statistical significance of the association between race and general attitudes toward older adults. Ultimately, an independent samples t-test comparing the mean general attitude scores of White participants to the mean scores of Black/African-Americans in the study was calculated. A significant difference between the means of the two groups ( $t = 2.053$ ,  $df = 150$ ,  $p < .05$ ) was found. The mean general attitudes scores of Whites ( $M = 119.39$ ,  $SD = 2.34$ ) was significantly higher than the mean of the Black/African-American group ( $M = 109.24$ ,  $SD = 29.20$ ). This indicates that Whites attitudes toward older adults in general proved significantly more negative than the attitudes of Blacks/African-Americans in the study. An initial Levene's Test for Equality of Variances proved to be not significant. Therefore equal variances were assumed in conducting the t-test for race differences (between Whites and Blacks/African-Americans). Table 10 shows results of the independent samples t-test indicating significance at a .05 alpha level.

Hypothesis 6 stated that there is no significant association between a young adult's age and his/her attitudes toward older adults in general (i.e., the null hypothesis). The results of a simple regression analysis demonstrated that

Table 10

Independent Samples T-Test for the Equality of Means (Hypothesis 5)

		t	df	Sig. (2-tailed)	Mean Difference
General Attitudes	Equal Variances Assumed	2.053	150	.042	10.14806

there was no statistically significant association between age and attitudes toward older adults in general. Therefore, based on the lack of significant statistical evidence the null hypothesis was not rejected. Table 11 shows the ANOVA summary table for Hypothesis 6 indicating no significance at a .05 level.

Table 11

ANOVA (Hypothesis 6)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2124.795	1	2124.795	3.154	.078a
Residual	113870.15	169	673.788		
Total	115994.95	170			

a. Predictors (Constant), young adult's age

b. Dependent Variable: general attitude score

Hypothesis 7 stated that there is no significant association between the total amount of time a young adult has spent living in a household that an older adult also resides in and his/her attitudes toward older adults in general (i.e., the null hypothesis). First, an independent samples t-test was calculated comparing the mean general attitude scores of those in the study who had at sometime lived with an older adult versus those who never had. No significant difference

between the two groups was found ( $t = .726$ ,  $df = 169$ ,  $p = .469$ ). The mean general attitudes scores of the 47 participants having lived with an older adult ( $M = 114.66$ ,  $SD = 26.82$ ) was not significantly different from the mean general attitudes score of the 124 study participants reporting never having lived with an older adult ( $M = 117.91$ ,  $SD = 25.90$ ). An initial Levene's Test for Equality of Variances proved to be not significant. Therefore equal variances were assumed in conducting the t-test for this hypothesis. Table 12 shows results of the independent samples t-test for equality of means indicating no significance at a .05 alpha level.

Table 12

Independent Samples T-Test for the Equality of Means (Hypothesis 7)

		t	df	Sig. (2-tailed)	Mean Difference
General Attitudes	Equal Variances Assumed	.726	169	.469	3.25172

A simple linear regression analysis was also conducted for Hypothesis 7 predicting attitudes toward older adult in general based on the amount of time spent living with an older adult. The results ( $F(1, 169) = .113$ ,  $p = .737$ ) demonstrated that there was no statistically significant association between time spent co-residing and attitudes toward older adults in general. Therefore, based on the lack of significant statistical evidence the null hypothesis was not rejected. Table 13 shows the ANOVA summary table for Hypothesis 7 indicating no significance at a .05 level.

Table 13

ANOVA (Hypothesis 7)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	77.823	1	77.823	.113	.737a
Residual	115917.12	169	685.900		
Total	115994.95	170			

a. Predictors (Constant), years co-residing

b. Dependent Variable: general attitude toward older adults score

Hypothesis 8 stated that there is no significant association between the intimacy experienced by a young adult in his/her relationship with a "most familiar" older adult and the young adult's attitudes toward the "most familiar" older adult (i.e., the null hypothesis). The results of a simple regression analysis demonstrated that there was a statistically significant association between social intimacy and attitudes toward a specific "most familiar" older adult ( $F(1, 169) = 34.58, p < .001$ ). Therefore, based on the significant statistical evidence the null hypothesis was rejected. A prediction equation of MFAM ATTITUDES SCORE =  $150.824 - .931(\text{MFAM INTIMACY SCORE})$  was obtained. Table 14 shows the ANOVA summary table for Hypothesis 8 indicating significance at a .001 level.

Hypothesis 9 stated that there is no significant relationship between the combination of intimacy (an aspect of quality of contact) and contact frequency (an aspect of quantity of contact) occurring in a young adult/"most familiar" older adult relationship and the young adult's attitudes toward a "most familiar" older adult. A stepwise regression analysis was conducted comparing the

Table 14

ANOVA (Hypothesis 8)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	24729.210	1	24729.210	34.580	.000a
Residual	120856.70	169	715.128		
Total	145585.91	170			

a. Predictors (Constant), intimacy with the "most familiar"

b. Dependent Variable: attitude toward the "most familiar" score

relationships of the independent variables, intimacy and contact frequency, to the dependent variable, attitudes toward a "most familiar" older adults. This was computed in order to determine whether *attitudes toward a "most familiar" older adult* can be predicted from the combination of relationship *intimacy* (an aspect of contact quality) and/or *frequency of contact* (an aspect of contact quantity). Results of the analysis indicated a significant linear regression ( $F(2, 168) = 17.532, p < .001$ ) when both independent variables were included in the model. A prediction equation of MFAM ATTITUDES SCORE =  $149.57 - .881(\text{MFAM INTIMACY SCORE}) - .182(\text{MFAM CONTACT})$  was obtained. A coefficient of determination value of .173 also indicated that 17.3% of the variation in attitudes toward a "most familiar" could be explained by differences in intimacy and frequency of contact (greater intimacy and greater frequency of contact in a relationships lead to more positive attitudes). In the analysis, intimacy alone was found to account for 17.0% of the variation in attitudes. The independent variable intimacy by itself proved significant at the .001 when included in the stepwise regression model along with frequency of contact. Frequency of

contact, on the other hand was not significant ( $p = .450$ ). However, a Pearson correlation comparing the relationship of frequency of contact by itself to "most familiar" attitude ( $r(169) = .385$ ) did prove significant at the .01 two-tailed level (see Table 5). Table 15 shows the regression analysis ANOVA summary table for Hypothesis 9 indicating significance at a .001 level.

Table 15

ANOVA (Hypothesis 9)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	25139.376	2	12569.688	17.532	.000a
Residual	120446.53	168	716.944		
Total	145585.91	170			

a. Predictors (Constant), mfam all contact/month, mfam intimacy score

b. Dependent Variable: mfam attitude score

Other Relevant Findings

Two different survey forms were administered to the sample with approximately half of the respondents receiving a Form A ( $n = 82$ ) version to complete and the other half receiving a Form B ( $n = 89$ ) version instead. This was done to determine if the order that scales in the survey was administered had any influence on attitudes. In effect, the two different versions used in the study were identical except for differences in the order that respondents were required to rate *attitudes toward older adults in general* and their *attitudes toward a "most familiar" older adult*. Using Form A (see Appendix B), respondents rated *attitudes toward older adults in general* first and *attitudes toward a specific "most*

*familiar*" older adult second. Using Form B (see Appendix C), this format (i.e., the order within the survey of two attitudes ratings) was reversed.

An independent samples t-test was calculated comparing the mean general attitude scores of Form A to the mean general attitude scores from the Form B group. The results indicated a significant difference between the means of the two groups ( $t = -2.274$ ,  $df = 169$ ,  $p < .05$ ). Thus, the mean of Form A's general attitude scores proved significantly lower ( $M = 112.34$ ,  $SD = 24.91$ ) than the mean of the Form B group scores ( $M = 121.33$ ,  $SD = 26.60$ ). This significance suggests a possible order or rating effect. An initial Levene's Test for Equality of Variances proved to be not significant. Therefore equal variances were assumed in conducting the t-test. Table 16 shows results of the independent samples t-test for equality of means indicating significance at a .05 alpha level.

Table 16

Independent Samples T-Test for the Equality of Means (Form A and Form B)

		t	df	Sig. (2-tailed)	Mean Difference
General Attitudes Score	Equal Variances Assumed	-2.274	169	.024	-8.98438

In addition, a Pearson correlation examining the relationship between the independent variable, *form type*, and the study's primary dependent variable, *attitudes toward older adults in general* was found to be weak but significant at a .05 (two-tailed) alpha level ( $r(169) = .172$ ).

In this study, a preliminary examination was conducted on the influence, if any, that dyad composition (i.e., same sex or opposite sex) of young adult/"most familiar" older adult relationships has on young adults' attitudes and intimacy level. Results of a Pearson correlational analysis revealed a weak but significant negative relationship ( $r(169) = -.190, p < .05$ ) between sex composition and attitude toward a "most familiar". This means that dyad homogeneity (i.e., same sex dyads) was positively correlated to more positive attitudes toward a "most familiar". This is based on the fact that the attitude scale used utilizes a reversed scoring format (i.e., a lower scores mean more positive attitudes).

An independent samples t-tests was calculated comparing the mean *attitudes toward older adults in general* scores of same sex dyads ( $M = 114.92, SD = 26.88$ ) to the mean scores of opposite sex dyads ( $M = 120.12, SD = 24.83$ ). Results indicated there was no significant difference between the means of the two groups ( $t = 1.278, df = 169, p = .203$ ). Table 17 shows results of the independent samples t-test for equality of means.

Another independent samples t-test was calculated comparing the mean *attitudes toward "most familiar" older adult* scores of same sex dyads ( $n = 102$ ) to the mean scores of opposite sex dyads ( $n = 69$ ). Results from this indicated that there was a significant difference between the means of the two groups ( $t = 2.514, df = 169, p < .05$ ). Thus, the mean scores for same sex dyads



Table 17

Independent Samples T-Test for the Equality of Means (Young Adult/"Most Familiar" Adult Dyads and Attitudes Toward Older Adults in General)

		t	df	Sig. (2-tailed)	Mean Difference
General Attitudes Score	Equal Variances Assumed	1.278	169	.203	5.19437

( $M = 88.58$ ,  $SD = 29.83$ ) was significantly lower than for opposite sex dyads ( $M = 99.87$ ,  $SD = 27.25$ ). This suggests that same sex dyads in the study reported significantly more positive attitudes toward their "most familiar" adults than did the opposite sex dyad group. Table 18 shows results of the independent samples t-test indicating significance at a .05 alpha level.

Table 18

Independent Samples T-Test for the Equality of Means (Young Adult/"Most Familiar" Adult Dyads and Attitudes Toward the "Most Familiar")

		t	df	Sig. (2-tailed)	Mean Difference
General Attitudes Score	Equal Variances Assumed	2.514	169	.013	11.29113

A third independent samples t-test was calculated comparing the mean *intimacy* scores (from a young adult's relationship with a "most familiar") of same sex dyads to the mean scores of opposite sex dyads. Results from this test indicated a significant difference between the means of the two groups ( $t = -2.565$ ,  $df = 169$ ,  $p < .05$ ). Therefore, the mean intimacy scores for same sex dyads ( $M = 64.04$ ,  $SD = 12.76$ ) was significantly higher than for opposite sex

dyads ( $M = 58.94$ ,  $SD = 12.73$ ). This means that the study's same sex dyads reported having significantly more intimacy with their "most familiar" than did the opposite sex dyads. Table 19 shows results of the independent samples t-test indicating significance at a .05 alpha level.

Table 19

Independent Samples T-Test for the Equality of Means (Young Adult/"Most Familiar" Adult Dyads and Intimacy With a "Most Familiar")

		t	df	Sig. (2-tailed)	Mean Difference
General Attitudes Score	Equal Variances Assumed	2.565	169	.011	-5.09719

Summary

A combination of regression analysis (simple and multiple) and t-tests were used to test the nine hypotheses from this study examining for predictors of attitude toward older adults (i.e., a specific "most familiar" older adult or older adults in general). Statistical evidence (at a minimum .05 alpha level) indicating a significant relationship with attitudes toward older adults (specific or general) was found in computing analyses on five of the nine hypotheses (i.e., Hypotheses 1, 3, 5, 8, and 9). In addition, several significant correlational relationships were found between independent predictor variables and dependent variables included in the study. Preliminary statistical data indicating that the sex dyad composition (i.e., same sex or opposite sex) of a young adult/"most familiar" older adult relationship has a significant effect on attitudes toward a "most familiar" (but not toward older adults in general) was also found in this study.

## CHAPTER 5 DISCUSSION

### Overview of the Study

The purpose of this study was to assess the association of seven contact-related variables to the *attitudes toward older adults in general* of young adult college students ages 18 to 35 years. In two of the nine hypotheses, variables were assessed for their association to a second dependent variable, the young adult's attitudes toward the "most familiar" older adult.

The seven independent variables examined in the study were (a) *attitudes toward a "most familiar" older adult*, (b) *contact frequency* (an aspect of contact quantity), (c) *relationship intimacy* (an aspect of contact quality), (d) *gender*, (e) *race*, (f) *age*, and (g) *total time spent living in the same household* with an older adult age 65 years or older. A total of 171 undergraduate college students from two different colleges in Jacksonville, Florida, participated in the study.

### Association Between Attitudes Toward a "Most Familiar" Older

### Adult and Attitudes Toward Older Adults in General

Hypothesis 1 stated that there is no association between a young adult's attitudes toward a specific "most familiar" older adult and his/her attitudes toward older adults in general (age 65 years or older). The results of this research supported the rejection of this null hypothesis. In effect, significance at a .001 alpha level was found in the association between a young adult's attitudes

toward a "most familiar" older adult and their attitudes toward older adults in general.

Studies to date measuring both attitude change toward a specific older adult and the generalizability of attitudes between a known or specific target and a general target (e.g., the group, older adults in general) have been mixed and inconclusive (Scarberry et al., 1997). While the results of some studies suggest that specific attitude change does not generalize to more positive attitudes toward the group as a whole or more positive behavior toward other specific group members, comparatively fewer studies have shown a generalization of attitudes to the larger group as a whole. In contrast to this study, past research has predominantly focused only on the assessment of attitudes toward the out-group contact situation participants themselves, and not beyond. Thus, while research in this area has been mixed, it is also limited. Consequently, evidence supporting generalization has been sparse. However, findings from this study do provide some support for the generalizability of intergroup attitudes from a specific target onto an out-group as a whole.

In this study, attitudes toward a specific "most familiar" older adult were also found to be more positive than reported attitudes toward older adults in general. This supports the findings of studies suggesting that attitudes toward a specific known older adult (Sanders & Pittman, 1988) --- or projections of oneself as an older adult in the future (Celejewski & Dion, 1998) --- are more positive than attitudes expressed toward a less specific target, such as older adults in general. This phenomenon has been explained in terms of the information one has about a target. Generally, evidence in this area indicates that when

available, individuals will use information other than just one's age, in forming attitudes or opinions about individuals or groups (Sanders & Pittman, 1988). Green (1981) has suggested that when evaluations of older adults in general are elicited, the probability of stereotypical perceptions and attitudes increases. Conversely, the likelihood of stereotyping decreases in the evaluations of individual targets. Results from this study seem to offer further support for these explanations.

#### Association Between Frequency of Contact and Attitudes Toward Older Adults in General

Hypothesis 2 stated that there is no association between a young adult's frequency of contact with a "most familiar" older adult and his/her attitudes toward older adults in general. The results of this research did not support the rejection of this hypothesis. In effect, no significant relationship was found between the frequency of contact a young adult has with a "most familiar" older adult in their life and his/her attitudes toward older adults in general.

Ultimately, these results are supportive and in line with the results of some of the more contemporary studies on contact which suggest that frequency of contact (quantity of contact) alone is insufficient as a predictor of attitudes toward older adults regardless of the specificity or familiarity of the identified target (i.e., a specific close older adult or the group older adults in general). In general, research conducted over the years has identified contact (when occurring under certain conditions) as an important predictor and promoter of more positive attitudes toward out-group members and groups. While much of the early research identified frequency of contact alone as being a complete and sufficient

measure of intergroup contact (Boon & Brussoni, 1996), more recent research has begun to include, and even emphasize, the importance of quality of contact. Contact according to these investigators (Knox, et al., 1986), is multidimensional and not unidimensional as previously treated. In this study contact quantity (with a "most familiar" older adult) was expanded from the usual direct face-to-face contact to include phone contacts, e-mails, and letters as well. Despite this, quantity of contact with a close familiar older adult was not found to generalize and be a significant predictor of attitudes toward older adults in general. However, frequency of contact in this study was found to be significantly correlated at a .01 alpha level with (a) the young adult's attitudes toward the specific "most familiar" adult, and (b) the level of intimacy (i.e., social intimacy or friendship) shared by the young adult and "most familiar" older adult. Though the findings do suggest that feelings of intimacy or closeness (an aspect of contact quality) and more positive attitudes are significantly associated with contact, causality between these variables was not identifiable, and cannot be assumed.

#### Association Between Intimacy and

#### Attitudes Toward Older Adults in General

Hypothesis 3 stated that there is no association between the intimacy experienced by a young adult in their relationship with a "most familiar" and his/her attitudes toward older adults in general. The results of this research supported the rejection of this null hypothesis. In effect, significance at a .05 level was found in a regression analysis examining the association between the intimacy reported by a young adult in his/her relationship with a "most familiar" older adult and his/her attitudes toward older adults in general.

To date, very few contact studies can be found in the literature which use affective dependent variables such as intimacy or friendship (i.e., social intimacy) in their design (Wright et al., 1997). Despite emphasis by early contact theorists (Allport, 1954; Amir, 1969; Cook, 1962) on the role that intimacy plays in attitude formation, research specifically focusing on intimacy and its role in cross-age relations has been limited. In addition, the results of more contemporary studies conducted in the area (Brussoni & Boon; Hale, 1998; Mitchell, 1997) have been limited and inconclusive, as well. Limitations in these studies include, but were not limited to, the (a) focus of research on grandparent relationships only, and (b) use by investigators of over-simplistic and empirically-unsubstantiated measurement instruments in assessing intimacy. In this study—which empirically supports the significance of the role that intimacy (i.e., a measure of quality of contact) plays in the prediction of attitude toward older adults—other older adults, along with grandparents, were included as targets. Participants in the current study were given directions to select the “most familiar” older adult in their life to evaluate. This could be a family member or non-family member. In some earlier studies that examined intimacy participants were instructed to evaluate a grandparent relationship, irregardless of whether it was a close relationship or not.

Intimacy, in this study unlike in other studies, was assessed using the 17-item Miller Social Intimacy Scale (MSIS). This is an instrument that has been shown to be empirically sound. Based on the study's findings, it also appears that the association between the variables intimacy (in a relationship with a specific familiar older adult) and one's attitudes toward older adults in general is

such that it can be generalized and crosses relationship levels (i.e. between a relationship with a known and specific individual and an out-group as a whole).

This study also expanded beyond earlier studies by focusing on the association between *social intimacy* (i.e., friendship) in particular, and attitudes toward older adults in general, and individually. Friendship (i.e., social intimacy), as a potential factor affecting intergroup and cross-age attitudes, has often been neglected in the research. Emphasizing the importance of friendship, Pettigrew (1998), in a recent review of contact theory research, proposed that friendship is a pivotal factor in attitudinal change. Offering further support, he proposed that optimal intergroup contact requires time for cross-group friendships to develop. According to Pettigrew intergroup contact cannot be short-term in nature. Ultimately, the results of this study provide further support to the idea that intimacy (a predictor of attitudes) and friendship are integral factors in cross-age development and change.

#### Association Between Gender and Attitudes Toward Older Adults in General

Hypothesis 4 stated that there is no association between a young adult's gender and his/her attitudes toward older adults in general. The results of this research did not support a rejection of the null hypothesis. Ultimately, no significant relationship was found between gender and a young adult's attitudes toward older adults in general.

Research findings suggesting gender differences are common. Studies for example, indicate significant differences between males and females in relationship areas such as their interpretation of what constitutes a close



relationship, friendship patterns, interaction styles, and intimacy (Beall & Sternberg, 1993). Silverstein, Parrott, and Bengston (1995) also found significant differences between males and females in caregiving. Regarding *aging*, Snyder and Meine (1994) found that males hold more positive images of aging than females do. Despite this, consensus is lacking in the literature focusing on attitudes toward older adults and gender differences. Reviews of the literature in this area indicate that findings are inconsistent, favor no gender effects (Chasteen, 2000), or are mixed (Tanksley, 1995).

These results are in line with those of the current study. No significant differences in the attitudes toward older adults of male and female participants were found. In addition, no significant gender differences were found regarding (a) attitudes toward a "most familiar" older adult, and (b) degree of intimacy in their relationship with a "most familiar". While these results seem contradictory to the studies indicating gender differences, they seem consistent with the literature regarding attitudes toward older adults.

A significant positive correlation was shown between the variable gender and intimacy (with the "most familiar"). This result is in line with other research indicating that females have more intimate relationships than do males.

#### Association Between Race and

#### Attitudes Toward Older Adults in General

Hypothesis 5 stated that there is no association between a young adult's race and his/her attitudes toward older adults in general. The results of this research supported the rejection of the null hypothesis. In effect, significance at

a .05 level was found in an independent t-test examining the association between a young adult's race and his/her attitudes toward older adults in general.

Because of the small numbers of Hispanic and Asian/Pacific Islander respondents participating in the study, the statistical analysis was conducted using only the White and African-American/Black sub-samples ( $n = 152$ ).

Therefore, the significance found indicates a difference between White and African-American/Black respondents only, and cannot be generalized to individuals of other races (e.g., Hispanic, Asian/Pacific Islander).

Consensus is lacking in the cross-age attitude literature in regard to the role race plays in the development of attitudes toward older adults. While researchers like Benedict (1999) contend that a socio-demographic factor such as race does play a role, others disagree. They argue instead that research specifically investigating the effects of race on cross-age attitudes is limited, controversial (Tanksley, 1995), and inconclusive. Other studies conducted by Benedict (1999) and Sheffler (1998), for example, have even found race to be insignificant. Because of the lack of consensus, others, such as Hawkins (1996), have suggested that additional more thorough research is needed to further examine factors such as race and gender and their role in cross-age attitude formation.

Results of this study, in effect, offer further support for the significance of the factor *race* (i.e., as it applies to a young adult forming perceptions/attitudes about older adults) and the role it plays in cross-age attitude formation. In this study Blacks were found to have significantly more positive attitudes toward older adults in general than did White respondents. One explanation for these

differences is that people differ both culturally and on the basis of their racial/ethnic background in cross-age areas such as filial responsibility (i.e., one's sense of responsibility to care for an older parent or family member); their *aging* views, values, and social norms; and the amount of respect and reverence with which they view and treat older adults. In many of the older, more traditional societies, older adults are highly respected and seen as historians and sources of wisdom (Zandi, et al., 1990).

Family structure and the socioeconomics of a family or race also may contribute to these differences. One possible explanation for the differences based on race is that Blacks/African-Americans, on a broad cultural level, may be more acculturated to respect older adults more than Whites.

Significant and positive correlations were also found between the factors race and co-residency. Co-residency, in the immediate study, consisted of an assessment of whether a young adult respondent had ever lived in the same household as an older adult, and if so, for how long? The findings of this study suggest that significantly more African-Americans/Blacks young adults co-reside with older adults. Correlational results also suggest that of those who have co-resided, African-Americans/Blacks spend a greater amount of time doing so than did their White counterparts. This too may be explained by the differences in socioeconomics between U.S. African-Americans/Blacks and Whites. Because Whites on the average have a higher per capita income than African-American/Blacks in the U.S., older Black/African-Americans adults may rely more on family for retirement housing and eldercare demands than do the more affluent Whites who in general have greater income. Because of these

differences in affluence, Whites may have greater access to quality formal care (e.g., nursing home care) services which are provided outside the home and by others.

In another finding, it was shown that the sub-sample of African-American/Blacks from the study was significantly older than the study's White sub-sample. This also may have contributed to the race/co-residency differences found between African-American/Blacks and Whites. In effect, the study's African-American/Black sub-sample in comparison to White respondents had lived longer, and therefore had greater opportunity, to live with an older adult at sometime in their life.

#### Association Between Age and

#### Attitudes Toward Older Adults in General

Hypothesis 6 stated that there is no association between a young adult's age and his/her attitudes toward older adults in general. The results of this research did not support a rejection of the null hypothesis. Ultimately, no significant relationship was found between a young adult's age and their attitudes toward older adults in general.

Age, like the dimensions race and gender, is an important cultural factor. Research however, has provided conflicting evidence in regards to the association between a perceiver's age and attitudes toward older adults in general. Results of this study are consistent with the findings of other investigators (Hawkins, 1996; Mosher-Ashley & Ball, 1999; Pettigrew and Tropp, 2000; Sheffler, 1998; Tanksley, 1995) who also concluded that a perceiver's age is insignificant as a predictor of attitudes toward older adults. No significant

correlational relationships were found between age and any other variable examined in the current study either.

These results are in contrast to the recent findings of others (Chasteen, 2000; Kalavar, 2001; Robak et al., 2000) who found perceiver age to be of significance. Results of these and other supporting studies have suggested that age-evolving factors such as the following are important: (a) a person's changing attitudes toward their own aging, (b) the subjective notions of young and old which change over time, and (c) the changing lifespan developmental processes, life experiences, and increased exposure to people of all ages that comes over time. None of these explanation are supported by the results of the current study because no significance was found between the variables *perceiver's age* and *attitudes toward older adults in general*. One possible explanation for why significance in this area was found in other studies, is that a majority of research on age-related attitude differences has been conducted using samples comprised of dichotomous groups (such as young and old adults) predominantly. Because of this there is great variability in the sample. This study however, focused on differences that may be occurring over time *within* one age group only (comparing attitudes of young adults between 18 and 35 years old) and not *between* age groups (e.g., young adults versus old adults). Thus while no significance was found in this current study, the possibility that perceiver age is significant over a wider age range cannot not be dismissed. The findings of this study--which suggest that young adult perceiver's age differences are not significant--is important because little is known about the evolution of attitudes toward older adults over time and within one life stage.

The question of whether Americans in general hold positive, neutral, or negative attitudes toward older adults in general is also an issue that may be affected by age. Historically, while studies using older adult samples have often reported positive attitudes toward older adults, most studies reporting negative attitudes toward older adults have been conducted on young adult samples only (Chasten, 2000). In contrast, in this study—which uses a broad young adult sample—it was revealed that the young adult sample had positive attitudes toward older adults in general and toward the “most familiar” adults. One possible explanation for this is that young adults today, as opposed to those decades ago, may have greater knowledge about aging in general and a greater acceptance of diversity among people. Just as it seems sexism and racism may have lessened somewhat over time, so perhaps has ageism.

#### Association Between Time Spent Living With an Older Adult and Attitudes Toward Older Adults in General

Hypothesis 7 stated that there is no association between the amount of time a young adult spends living with an older adult and his/her attitudes toward older adults in general. The results of this research did not support a rejection of the null hypothesis. Ultimately, no significant relationship was found between time spent living with an older adult in the same household and a young adult's attitudes toward older adults in general.

Research on the effects of co-residency on cross-age attitudes has been sparse and inconclusive. Many of past studies have used over-simplistic descriptions and measures of contact. Frequently only quantity of contact was examined, for example (O'Hanlon & Brookover, 2002). Of the few studies that

examined the relationship between co-residency and cross-age attitudes, a majority found that living with an older adult was statistically insignificant. This study also found no significance in the relationship between co-residency and attitudes toward older adults in general. One possible explanation for this is that the quality of such a relationship may ultimately be more important in determining one's attitudes than the quantity of contact.

#### Association Between Intimacy and Attitudes Toward a "Most Familiar" Older Adult

Hypothesis 8 stated that there is no association between the intimacy experienced by a young adult in their relationship with a "most familiar" and his/her attitudes toward a specific "most familiar" older adult. The results of this research supported the rejection of this null hypothesis. In effect, significance at a .001 level was found in a regression analysis examining the association between the intimacy reported by a young adult in his/her relationship with a "most familiar" older adult and his/her attitudes toward that same older adult.

Also in this study (hypothesis 3) it was found that intimacy and attitudes toward older adults in general were significantly related. This was at a .05 alpha level only, however. Intimacy (in a relationship with a "most familiar"), as might be expected, also was found to be much more strongly correlated with the young adult's attitudes toward the specific "most familiar" ( $r(169) = -.412, p < .01$ ) than it was toward older adults in general ( $r(169) = -.190, p < .05$ ). Ultimately, intimacy was found to be a predictor of attitudes toward a "most familiar" older adult.

Association Between the Combination of Intimacy and Contact Frequency  
and Attitudes Toward a Specific "Most Familiar" Older Adult

Hypothesis 9 stated that there is no association between the combination of intimacy (an aspect of contact *quality*) and contact frequency (an aspect of contact *quantity*) that a young adult has with a "most familiar" and the young adult's attitudes toward the "most familiar". The results of this research supported the rejection of this null hypothesis. In effect, significance at a .001 level was found in a step-wise regression analysis. A significant positive correlational relationship was also found between the variables intimacy and contact frequency.

In one criticism of cross-age research Knox, Gekoski, and Johnson (1986) have argued that contact with older adults often is inadequately assessed. One argument is that only quantity of contact--but not quality of contact--has been assessed historically. Contact according to these investigators is not unidimensional however. While one body of literature contends that contact frequency is a sufficient measure by itself of contact (Boon & Brussoni, 1996), others hold that quantitative aspects are over-emphasized (Mills et al., 1998). Some investigators and theorists have even argued that quality of contact may be more significant a factor than quantity of contact. Schwartz and Simmons (2001) have gone as far as to hypothesize that a single factor, quality of contact--not quantity of contact--is directly related to attitudes toward older adults.

The findings of the current study suggest that both aspects of contact are important and significant when combined and included in the regression model. Results also indicate that when these two factors are considered separately,



quality of contact (operationalized as social intimacy or friendship) is a significant predictor of attitudes toward a "most familiar", while quantity of contact (operationalized in this study as being the number of days of contact per month) is not ( $p = .450$ ). In support of this, a coefficient of determination revealed that 17.3% of the variation in attitudes toward a "most familiar" can be explained by differences in the independent variables, intimacy (quality of contact) and contact frequency (quantity of contact). However, of this 17.3% variation, 17% was found to be attributable to the differences in the quality of contact alone. These results suggest that greater intimacy and greater frequency of contact are together associated with more positive attitudes, however no cause and effect relationships can be implied. The findings also suggest that quality of contact, or intimacy as it was operationalized in this study, is a significant predictor of attitudes, while quantity of contact by itself is not. However, contact frequency in this study was shown to be moderately and positively correlated with intimacy. Thus, the results of this study seem to suggest that contact is multidimensional and cannot adequately be assessed in terms of either quality of contact or quantity of contact alone.

### Theoretical Implications

The results of this study, in varying degrees, support the theoretical frameworks guiding this research; *social identity theory* (Tajfel, 1978, 1982; Tajfel & Turner, 1979; Turner 1975, 1985), *the contact hypothesis* (Allport, 1954; Amir, 1969, 1976, 1994; Pettigrew, 1998; Stephan & Stephan, 1996, 2001), and *symbolic interactionism* (Blumer, 1937, 1969; Burr et al., 1979; Manis & Melzer, 1978; Rose, 1962).

At its core, social identity theory proposes that intergroup attitudes, prejudice, and stereotyping, occur naturally between members of different out-groups. This is thought to develop out of competition between individuals which begins as a result of the tendency of individuals to categorize others and compare them to oneself. Ultimately, social identity theorists have proposed the existence of a universal schema of comparing and categorizing which is comprised of three basic components. In effect, the findings of this study seems to provide support for one of these components, the *in-group favoritism principle*. This principle suggests that individuals in general express favoritism and affection toward those whom they perceive as being fellow in-group members and similar to themselves. In the current study, affection, in the form of friendship and intimacy with a "most familiar" older adult, was significantly associated with more positive attitudes toward that "most familiar". Additional support for the in-group favoritism principle comes from study findings indicating that same sex young adult/"most familiar" dyads are associated with significantly greater intimacy and more positive attitudes than are opposite sex dyads. As the principle suggests, individuals perceived as being in-group or similar to oneself will be viewed in more favorable terms.

Unlike Social Identity Theory (SIT) which attempts to explain how and why intergroup attitudes develop, the Contact Hypothesis focuses on the understanding of intergroup contact (e.g., cross-age contact between young adults and older adults) and its influence on attitudes toward out-groups. Essentially, its focus is on the prediction of conditions under which intergroup

contact leads to positive attitude change and a reduction in out-group stereotyping and prejudice.

The result of this study provides support for the hypothesis's primary contention that contact between different out-group members is a key factor and predictor of positive attitude development and change. In this study the combination of intimacy (an aspect of contact quality) and frequency of contact (an aspect of contact quantity) were found to be significant predictors of a young adult's attitudes toward a specific "most familiar" older adult. Together differences in these two variables accounted for 17.3% of the variability in attitudes toward a "most familiar" older adult. Results also showed intimacy to be a key significant predictor of positive attitude toward a "most familiar", and toward older adults in general. By itself, intimacy accounted for 17% of the variability in attitudes toward a "most familiar". Along with *friendship*, intimacy was identified by many early contact theorists as being an essential component in situations where positive intergroup attitude change takes place. Another type of contact, co-residency with an older adult, was not found in this study to be a significant predictor of positive attitude, however.

Symbolic interactionism, a third theoretical framework guiding this research, is based on the belief that an individual's beliefs, attitudes, and behaviors are influenced by the individual's interactions with others (Maconis, 2001). In this current study support was provided for this concept by the fact that young adult participants tended to view "most familiar" older adults whom they reported as having had intimate and friendly relationships with in positive terms generally. "Most familiars" were also identified by the young adults in less

negative terms than were unknown older adult targets (older adults in general). Additional support for symbolic interactionism is also provided by the finding that interaction or contact frequency with a "most familiar" is significantly and positively correlated with greater relationship intimacy and more positive attitudes toward a "most familiar".

The significant association found between perceiver race and his/her attitudes toward older adults specifically--and older adults in general also--support the theoretical orientations of the symbolic interaction theory.

Socialization, culture, and personal development are all considered to be major influences in the symbolic interactionism process. According to theory, attitudes develop as a result of the learned meanings, values, sentiments and knowledge that an individual obtains through interactions with individuals, society, and the world. Culture, in this study may explain in part, why differences between the attitudes toward older adults of Blacks/African-Americans and Whites were found in this study.

#### Practice Implications

In a global sense, this study and its finding adds to the growing literature, knowledge, and understanding to date on (a) the social problem ageism, (b) intergroup relations in general, (c) cross-age relations specifically, (d) intimacy, and (e) contact. In a practical sense the results may be most important in regards to the social problem of ageism which negatively affects individuals of all ages and remains a problem in the U.S. and globally. Ageism continues to be one of the most insidious and expensive social problems worldwide. Affecting more than 1.5 million older U.S. older citizens annually, ageism has even been

linked to the life threatening problem of elder abuse (Mills et al., 1998). It is also estimated that ageism costs the U.S. alone as much as \$277 billion annually.

Study findings and information may also be invaluable to gerontologists, educators, researchers, and others whose primary focus is on the development and refinement of intergenerational programming designed to link the old and the young in a variety of settings and formats. Some of these programs and strategies have been shown in the past to be effective in increasing cross-age interactions, reducing stereotypes, and modifying attitudes. Results of the current study specifically could aid gerontologists and others in the early identification of segments of society whose members may be at a greater risk than others for stereotyping, discrimination, and the development of more negative attitudes and behaviors toward older adults. In doing so, customized programming could be designed and made available to those deemed high risk. Programming could be provided to high risk groups early on, as well.

The findings of this study also emphasize the importance of intimacy and friendship in the development of positive relations and attitudes between individuals of different ages specifically, and people from different out-groups of all kinds in general. Implied in this is the idea that if cross-age attitudes and relations are to improve, greater emphasis must be given to the fostering of longer term and more intimate one-on-one relationships. In addition, the study's findings provide support for the salience of quality of contact over contact quantity in predicting positive cross-age attitudes. Ultimately, all of this could be utilized in the design and facilitation of new and more effective intergenerational programming and strategies in the future.

Concepts and conclusions from the study could also be utilized by school diversity programs to increase their effectiveness. These programs, in part, focus on education and experience. One goal, based on the results of the study, might be to offer children more opportunities for positive one-on-one contact with older adults. Ideally, the contact experiences would be designed to be more enduring and intimate, and not superficial and brief. Efforts could focus on helping the young person to enhance existing relationships with older adults (e.g., their grandmother). In addition students could be encouraged, and provided opportunities, to develop new non-stereotyped older adult relationships (e.g., older adult teacher's aides could be hired, for instance, to work closely and one-on-one with students).

At the university level, information from this study regarding attitude change and improvement could be infused into the curriculum and teaching methods of academic and training programs whose graduates will be providing services to, and working closely with, older adults after graduation.

#### Future Research

Future research on the cross-age attitudes of young adults toward older adults should focus on the identification of other salient environmental and personal variables and predictors of positive attitudes toward older adults. This is in agreement with the suggestions of Kite and Johnson (1988) more than two decades ago. They recommended that future research be directed toward the further identification of specific conditions under which negative attitudes toward older adults occur, and not toward whether older adults as a group are evaluated more negatively than other groups

Additional levels of the independent variables explored in this study might also be examined for their predictability and/or cause-and-effect association with attitudes toward older adults. This should include the examination at different levels of intimacy, race, gender, and age. This study showed social intimacy (i.e., friendship) to be an important predictor but did not investigate the association of cross-age attitudes with other types of intimacy also identified by Schaefer and Olson (1981) including spiritual intimacy and emotional intimacy.

An examination of the independent variable race should be expanded to include differences, if any, between people of different races (not just Whites and Blacks/African-Americans). To conduct such a study, a larger, more diverse, random sample unlike the convenience sample used for this study, would be needed.

Future research should examine the association between the gender breakdowns in a young adult/closest older adult relationship, the level of intimacy in the relationship, and the young adult's attitudes toward older adults. Preliminary data gathered in this study suggests that this may be a potentially important factor in regards to contact and intergroup attitude development.

Finally in regards to the variable age, future research should focus more intently on determining whether a specific pattern of evolution of cross-age attitude development and change takes place over the life cycle at different stages. Ideally, such a study would utilize a longitudinal design (cross-sectional designs have historically been more predominant) to study cross-age attitudes at all life stages, including middle adulthood. Such a design would enable

investigators to examine from a developmental perspective any changes in attitudes that may be occurring over time and within subjects.

Future research should also examine more closely the differences in attitudes toward older adult targets of different ages. This is essential because older adults age 65 years or older may be a more heterogeneous group than previously thought. With the dramatic increases in the expected life span of humans taking place over the years, old age is changing. Today it includes individuals ranging in age from 65 to centenarians, 100 years old or older. Developmentally speaking, these individuals differ from each other in many ways and may be perceived by individuals of different ages differently also. Thus, future research should focus more closely on identifying the similarities and differences of attitudes toward the young-old (ages 65 to 74), old-old (ages 75 to 99), or oldest old (ages 100 or over) (Hooyman & Kiyak, 1999).

Finally future studies need to begin to look at the relationships of individuals' attitudes toward older adults and their association with other dependent or independent caregiving-related factors such as filial responsibility, anxiety about aging, willingness to be a caregiver, and elder abuse.

#### Limitations of the Study

There were a number of limitations that characterized the research and may have compromised the validity or generalizability of the study's findings. Identified areas of limitation addressed include the study's sample selection and size, variable selection and operationalization, measurement, and data analysis.



### Sample Selection and Size

Sampling issues and the subsequent limiting of generalizability was one limitation of this study. Although attempts were made to select a representative sample, factors such as costs, time factors, and voluntary subject participation limited the generalizability and validity of the study results and implications. In effect, the sample of convenience method used in this study considerably limits the generalization of the results beyond the given population pool (Mertens, 1998).

The size and breadth of the sample was also limited, to some degree, by the number of university students and personnel who were willing to agree to participate in this study without compensation. Inherent also in this sample of convenience is some bias because it is comprised only of young adult participants who were attending one of only two institutions of higher education. Inherent in the sample selection also is bias favoring young adults having the financial resources and academic ability to attend college. Those individuals not having the intellect or financial resources to attend college were not considered in the sample selection process. This potentially could be a confounding variable in this study because both family SES and educational achievement have already been shown to be positively correlated with more positive attitudes toward out-groups.

Both institutions from which study participants were recruited are located within the same southeastern U.S. metropolitan area also. While there is diversity in the region and within the two institutions, there may be inherent biases in regards to the region's religion, politics, education, and social aspects

that were unaccounted for in the study. The relatively small size of this study's sample ( $N = 171$ ) in comparison to that of other studies, may have negatively affected the statistical power of this study's analyses and results also. A smaller sample means less dependent variable variability and ultimately less statistical sensitivity (Mertens, 1998).

General guidelines for estimating optimum sample size have been identified. These "rule of thumb" guidelines recommend at least 15 observations/subjects per variable for multiple regression. One hundred observations/subjects for each major subgroup and between 20 and 50 observations/subjects per minor subgroup are recommended when conducting a survey study (Mertens, 1998).

Because of this studies smaller sample size and lack of adequate racial diversity, subgroup analysis was also compromised (Gall, Borg & Gall; 1996). In effect, the investigation of the variable race in this study was adjusted to include only the White and Black/African-American sub-samples ( $n = 152$ ) from the total sample. This decision was made because of the small number of Hispanics ( $n = 9$ ) and Asian/Pacific Islanders ( $n = 10$ ) ultimately participating in the study. The findings of the study may also have been compromised to some extent by an initial delimitation process during which 36 of the original participants and their data were eliminated from the sample. Seventeen were eliminated because of the age parameters required for the study. Another 19 were eliminated because of incomplete or incorrectly completed questionnaires. With a small sample size and the loss of 36 participants also comes a loss in statistical power and

variability. Thus, a small sample size can limit the power of statistics to detect anything but the strongest effects and increases the likelihood of type II error.

### Variable Selection and Operationalization

A failure of the study's investigators to collect other pertinent data which may have been useful in the interpretation of certain findings was also a shortfall of this study. Data gathered regarding the co-residency of young adults with older adults would have been much more meaningful had the investigators also gathered information about certain qualitative details of the co-residency experience (e.g., was the experience perceived by the young adult as being a positive, neutral, or negative one by each young adult, and what made it so?).

The treatment and operationalization of the group older adults as a homogenous group may not be accurate and may have negatively affected the validity of the results. Contemporary theorists and researchers have begun to characterize the group, older adults age 65 years or older as a heterogeneous group comprised of at least 3 sub-groups: the young old (ages 65 to 74), old-old (ages 75 to 99), and oldest old (ages 100 or over) (Hooyman & Kiyak, 1999).

In this study the variable, *social intimacy* (friendship) was used to represent the factor, quality of contact in comparing the predictive power of *quality of contact* to *quality of contact*. In reality, social intimacy is its own represents only one aspect of the broader construct, quality of contact. Therefore, any conclusions or generalizations about the predictive power of quality of contact made on the basis of this study's results only would lack some validity. Ultimately, this study's results and conclusions cannot be generalized or applied to the broader construct, intimacy (in general), or to any of the other

specific types of intimacy (e.g., emotional intimacy) identified by Schaefer and Olson (1981) previously.

### Measurement

While there is ample empirical data suggesting that the assessment instruments used in this study are valid and reliable, this study was limited to some degree by its mono-operational format. The assessment of the variables social intimacy, quantity of relationship contact, and quality of relationship contact, each were based exclusively on the subjective self-perceptions of the young adult respondents only. Thus the perceptions and attitudes of the "most familiar" older adult never were considered. This is a limitation of the study.

In addition, the study's almost exclusive means of assessment was self-report, a modality characterized as the *insider's view*. Response bias is always a concern when relying on self-report information. This is because of the tendency of participants to answer self-report questionnaires in a socially desirable manner. Based on this, it is possible that some the respondents may have reported attitudes that were more positive than they actually were in order not to appear judgmental or negative. Social desirability may also have affected whether or not a student decided to participate in the study in the first place as well. Because a vast majority of the study's surveys were completed in-class and by most students, some students may have felt pressured to also participate and avoid appearing uncooperative to others (i.e., the investigator, classroom instructor, or fellow students).

It is also possible that the participants' awareness that they are involved in a research project may have influenced how they answered certain questions

and items. In an attempt to minimize the possibilities of this, participants in this study were ensured anonymity and encouraged to complete the questionnaires independently and honestly. Historically, self-report formats have shown to be vulnerable to other response biases, as well (Sax, 1989).

Response bias due to repeated measures and ordering was another potential source of error in this particular study. This is because one instrument, the ASD (Rosencranz & McNevin, 1969), was administered twice to the study's young adult respondents. It was administered once in order to measure the young adult's attitudes toward a particular "most familiar" older adult (an independent variable of the study) and second time to measure the young adult's attitudes toward older adults in general (the dependent variable). In order to control for this potential bias, two versions of the study's survey (Form A and Form B) were used. And, these forms were randomly distributed. In effect, the order of the two administrations was reversed for approximately half of all the respondents. Thus, approximately fifty percent of respondents completed Form A of the survey. It required them to complete the assessment of attitudes toward the "most familiar" older adult first. Conversely, the other half of the sample completed Form B which reversed the order of the two assessments.

Statistical analysis comparing the *attitudes toward older adults in general* scores of Form A users and Form B users indicated that there was a significant difference between the two. In effect, Form A users (rating attitudes toward older adults in general, first) reported significantly more positive attitudes toward older adults in general than did their counterpart Form B users (rating attitudes toward a "most familiar", first). This suggests the possibility of a confounding variable in

the form of a significant order or rating effect (e.g., a repeated measures or learning effect as a result of completing the same instrument twice within the same survey). In general, respondents, regardless of the form used, rated the more vague, unknown target *older adults in general* less positively than they did the specific, individual, and known target the "most familiar" older adult.

A further analysis of the attitude and intimacy scores, indicates that Form A users (who had reported significantly more positive attitudes toward older adults in general than Form B users)--also had attitudes toward the "most familiar" which were more positive. These Form A ( $M = 92.23$ ,  $SD = 3.53$ ) and Form B ( $M = 93.97$ ,  $SD = 2.83$ ) user differences were not significant, however. The mean intimacy score of Form A users ( $M = 64.23$ ,  $SD = 1.22$ ) was also found to be significantly higher (at a .05 level) than that of Form B users. In effect, Form A users, as a subgroup, reported a greater level of intimacy with 'most familiars'. This consistency in the direction and magnitude of user scores, in effect, provides criterion-related concurrent validity that supports the accuracy of the *attitudes toward older adults in general* scores reported in this study. Based on this, one possible explanation for score differences found in this study is that a Type I error occurred. Ultimately this would mean that a learning or ordering effect had not taken place, study scores were valid, and Form A and B users were from the same population.

One strategy for controlling for learning or order effects and reducing bias is through the reverse ordering of treatments or instruments (Mertens, 1998). This strategy was utilized in this study with the staggering of the order of instruments through the use of two versions of the randomly distributed survey.

### Data Analysis

Tests of assumption applying to regression analysis were conducted for distribution normality and the homoscedasticity between the errors of prediction and predicted dependent variable scores (i.e., attitudes toward older adult scores). This was done by examining the scatter plots of the residuals (Tabachnick & Fidell, 2001).

One assumption of simple linear regression is normality. This is the assumption that each variable, and its linear combinations, are normally distributed. When this is true, the residuals of analysis will also be normally distributed and independent (Tabachnick & Fidell, 2001). Although normality is not always required, the results of a multivariate analysis will usually be more valid if the study's variables are normally distributed. In effect, normality can be assessed either statistically or through graphical methods (i.e., a scatter plot). A review of the study's Normal P-P Plots of Regression Standardized Residual scatter plots (comparing expected residuals to observed residuals for each independent variable/dependent variable combination) revealed no abnormal distributions.

A second assumption holds that homoscedasticity exists when the standard deviations of errors of prediction are similar for all predicted scores. On a scatter plot, homoscedasticity is illustrated when the band of residuals is approximately the same width (with some bulging in the middle of the distribution) for all the predicted values of a variable. A review of the scatter plots for this study indicates variability in band widths indicating heteroscedasticity, not homoscedasticity. While this is a limitation, it should be noted that

heteroschedasticity is not fatal when an analysis is of ungrouped data. When this does occurs, an analysis may be weakened but not invalidated. Errors of heteroschedasticity frequently can be corrected. This can be achieved through the transformation of dependent variables scores (Tabachnick & Fidell, 2001).

Finally, while regression analysis/correlational analysis allows for the identification of the direction and strength of an association between variables, a correlational/survey method, such as that used in this study, does not provide the sufficient statistical information needed to identify causality (Miller & Salkind, 2002). A strong positive correlation between variables does not provide an investigator with the necessary information to identify (a) which variable causes another, or (b) whether the relationship between two variables is instead caused by a third unknown confounding variable. Based on this, a final limitation of the study may be its survey method design and use of correlational analysis.

### Summary

In summary, this chapter provides a discussion of the results, and recommendations/limitations, in response to this study's investigation of the influence of (a) *attitudes toward a "most familiar" older adult age 65 years or older*, (b) *social intimacy* (i.e., an aspect of contact quality similar to the construct, friendship), (c) *frequency of contact* (an aspect of contact quantity), (d) a young adult's *gender*, (e) a young adult's *age*, (f) a young adult's *race*, and (g) *co-residency with an older adult* (i.e., whether a young adult has co-resided with an older adult at sometime and, if so, for how long) on a young adult's *attitudes toward older adults in general*. The relationship of both social intimacy and frequency of contact were also examined in regards to their relationship to a



second independent variable, attitudes toward a "most familiar" older adult.

Ultimately, the variables that were found to be significant predictors of attitudes were discussed in detail. Based on this study and the conclusions, directions for future research were also suggested and discussed.

## REFERENCES

- Aday, R., Aday, K., Arnold, J., & Bendix, S. (1996). Changing children's perceptions of the elderly: The effects of intergenerational contact. *Gerontology and Geriatrics Education*, 16(3), 37-51.
- Aday, R. H., Sims, C. R., & McDuffie, W. (1996). Changing children's attitudes toward the elderly: the longitudinal effects of an intergenerational partners program. *Journal of Research in Child Education*, 10, 143-151.
- Administration on Aging. (1996). Aging into the 21<sup>st</sup> century: Summary and implications [On-line]. Available: [http://www.aoa.dhhs.gov/aoa/stats/aging21\\_summary.html](http://www.aoa.dhhs.gov/aoa/stats/aging21_summary.html). (Last accessed March, 1992).
- Alreshoud, A., & Koeske, G. F. (1997). Arab students' attitudes toward and amount of social contact with Americans: A causal process analysis of cross-sectional data. *Journal of Social Psychology*, 137, 235-245.
- Ajzen, I. (1985). Attitude structure and behavior. In A. R. Pratkanis, S. J. Breckler, and A. G. Greenwald (Eds.), *Attitude structure and function* (pp. 241-274). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Allport, G. W. (1954). *The nature of prejudice*. Boston: Beacon Press.
- Amir, Y. (1969). Contact hypothesis in ethnic relations. *Psychological Bulletin*, 71(5), 319-342.
- Amir, Y. (1976). The role of intergroup contact in change of prejudice and race relations. In P. A. Katz (Ed.), *Towards the elimination of racism* (245-280). NY: Pergamon.
- Amir, Y. (1994). The contact hypothesis in intergroup relations. In W. Lonner & R. Milpass (Eds.), *Psychology and culture* (231-237). Needham Heights, MA: Allyn and Bacon.
- Anderson, L. S. (1995). Outdoor adventure recreation and social integration: A social-psychological perspective. (Doctoral dissertation, University of Minnesota, 1995). *Dissertation Abstract International*, 55, 07: 2137.

Angiullo, L., Whitbourne, S. K., & Powers, C. (1996). The effects of instruction and experience on college students' attitudes toward the elderly. *Educational Gerontology*, 22, 483-495.

Atchley, R. C. (2000). *Social forces and aging: An introduction to social gerontology*. Belmont, CA: Wadsworth.

Bailey, W. T. (1991). Knowledge, attitudes, and psychosocial development of young and old adults. *Educational Gerontology*, 17, 269-274.

Barton, H. (1999). Effects of an intergenerational program on the attitudes of emotionally disturbed youth toward the elderly. *Educational Gerontology*, 25, 623-640.

Beall, A. E., & Sternberg, R. J. (1993). *The psychology of gender*. New York: Guilford.

Bell, J. (1992). In search of a discourse on aging: The elderly on television. *The Gerontologist*, 32, 305-311.

Benedict, S. M. (1999). Factors affecting attitudes and attitude change toward older adults and the aging process (Doctoral dissertation, University of South Carolina, 1999). *Dissertation Abstract International*, 60, 04B.

Benner, D. G., and Hill P. C. (Eds.) (1999). Intimacy. *Baker Encyclopedia of Psychology & Counseling* (2nd ed.) (p. 648), Grand Rapids, MI: Baker Books.

Berenbaum, R. (2000). Motivating students in the helping professions to work with the aged. *Educational Gerontology*, 26, 83-95.

Bigler, R. S., Jones, L. C., & Lobliner, D. B. (1997). Social categorization and the formation of intergroup attitudes in children. *Child Development*, 68, 530-543.

Blumer, H. (1937). Social psychology. In E. P. Schmidt (Ed.), *Man and society*. NY: Prentice-Hall.

Blumer, H. (1969). *Symbolic interaction*. Englewood Cliffs, NJ: Prentice Hall.

Blunk, E. M., & Williams, S. W. (1997). The effects of curriculum on preschool children's perception of the elderly. *Educational Gerontology*, 23, 233-241.

Boon, S. D., & Brussoni, M. J. (1996). Young adults' relationships with their "closest" grandparents. *Journal of Social Behavior and Personality*, 11(3), 439-458.

Borgatta, E. F., & Borgatta, M. L. (Eds.). (2000). Intergroup and interorganizational relations. *Encyclopedia of Sociology*, 2, 962-964.

Braithewaite, V., Lynd-Stevenson, R., & Pigram, D. (1993). An empirical study of ageism: From polemics to scientific utility. *Australian Psychologist*, 28(1), 9-15.

Breckler, S. (1984). Empirical validation of affect, behavior, and cognition as distinct components of attitude. *Journal of Personality and Social Psychology*, 47, 1191-1205.

Breckler, S. & Wiggins, E. (1989). Affect versus evaluation in the structure of attitudes. *Journal of Experimental Social Psychology*, 25, 253-271.

Brewer, M. B., & Brown, R. J. (1998). In D. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology*, 2 (pp. 554-594). Boston: McGraw-Hill.

Brewer, M. B., & Gaertner, S. L. (2001). Toward reduction of prejudice: Intergroup contact and social categorization. In R. Brown & S. L. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 451-474). Oxford: Blackwell Publishers Ltd.

Brewer, M. B., & Miller, N. (1984). Beyond the contact hypothesis: Theoretical perspectives on desegregation. In N. Miller & M. B. Brewer (Eds.), *Groups in contact: the psychology of desegregation* (pp. 281-302). Orlando: Academic Press.

Brewer, M. B., & Miller, N. (1996). *Intergroup relations*. Pacific Grove, CA: Brooks/Cole.

Brophy, I. N. (1946). The luxury of anti-negro prejudice. *Public Opinion Quarterly*, 9, 456-466.

Brubaker, T. H., & Powers, E. A. (1976). The stereotype of old: A review and alternative approach. *Journal of Gerontology*, 31(4), 441-447.

Brussoni, M. J., & Boon, S. D. (1998). Grandparental impact in young adults' relationships with their closest grandparents: The role of relationship strength and emotional closeness. *International Journal of Aging and Human Development*, 46(4), 267-286.

Burr, J., & Mutchler, J. E. (1999). Race and ethnic variation in norms of filial responsibility among older persons. *Journal of Marriage and Family*, 61, 674-687.

Burr, W. R., Leigh, G. K., Day, R. D., & Constantine, J. (1979). Symbolic interaction and the family. In W. R. Burr, R. Hill, F. I. Nye, & I. L. Reiss (Eds.), *Contemporary theories about the family* (pp. 42-105). NY: Free Press.

Butler, R. (1989). Dispelling ageism: The cross-cutting intervention. *Annals of the American Academy of Political and Social Sciences*, 503, 138-147.

Cacioppo, J. T., Petty, R. E., & Geen, T. R. (1989). Attitude structure and function. In A. R. Pratkanis, S. J. Breckler, and A. G. Greenwald (Eds.), *Attitude structure and function* (pp. 275-310). Hillsdale, NJ: Lawrence Erlbaum Associates.

Cameron, J. A., Alvarez, J. M., Ruble, D. N., & Fuligni, A. J. (2001). Children's lay theories about in-groups and out-groups: Reconceptualizing research on prejudice. *Personality and Social Psychology Review*, 5(2), 118-128.

Carter, R., & McGoldrick, M. (Eds.). (1999). *The expanded family life cycle: Individual, family, and social perspectives* (3<sup>rd</sup> ed.). Needham Heights, MA: Allyn & Bacon.

Caspi, A. (1984). Contact hypothesis and cross-age attitudes: A field study of cross-age contact. *Social Psychology Quarterly*, 47, 74-80.

Celejewski, I., & Dion, K. (1998). Self-perception and perception of age groups as a function of the perceiver's category membership. *Journal of Aging and Human Development*, 47(3), 205-216.

Chasteen, A. (2000). The role of age-related attitudes in perceptions of elderly individuals. *Basic and Applied Social Psychology*, 22(3), 147-156.

Colley, M. R., & Eddy, J. M. (1988). Interactions of university students with elderly individuals: An investigation into correlates. *Educational Gerontology*, 14, 33-43.

Connolly, P. (2000). What now for the contact hypothesis? Towards a new research agenda. *Race, Ethnicity, and Education*, 3(2), 169-193.

Cook, S. W. (1962). The systematic analysis of socially significant events: A strategy for social research. *Journal of Social Issues*, 18, 66-84.

Corcoran, K., & Fischer, J. (2000). *Measures for clinical practice: A sourcebook* (3<sup>rd</sup> ed.). New York: The Free Press.

Cournoyer, R. J., & Mahalik, J. R. (1995). Cross-sectional study of gender role conflict examining college-aged and middle-aged men. *Journal of Counseling Psychology*, 42, 11-19.

Crockett, W. H., & Hummert, M. L. (1987). Perceptions of aging and the elderly. In K. W. Schaie (Series Ed.) & C. Eisdorfer (Vol. Ed.), *Annual review of gerontology and geriatrics*, 7 (pp. 217-241). New York: Springer.

Deforges, D. M., Lord, C. G., Ramsey, S. L., Mason, J. A. and Van Leeuwen, M. D. (1991). Effects of structured cooperative contact on changing negative attitudes toward stigmatized social groups. *Journal of Personality and Social Psychology*, 60, 531-544.

Deutsch, M., & Collins, M. (1951). *Interracial housing: A psychological evaluation of a social experiment*. Minneapolis: University of Minnesota.

Dixon, J. (2001). Contact and boundaries: "Locating" the social psychology of intergroup relations. *Theory & Psychology*, 11(5), 587-608.

Doise, W. (1978). *Groups and individuals: Explanations in social psychology*. Cambridge: Cambridge University Press.

Dovidio, J., Kawakami, K., & Gaertner, S. L. (2000). Reducing contemporary prejudice: Combating explicit and implicit bias at the individual and intergroup level. In S. Oskamp (Ed.) *Reducing prejudice and discrimination* (pp. 93-114), Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Downs, C., & Hillje, E. S. (1991). Reassessment of the Miller Social Intimacy Scale: Use with mixed- and same-sex dyads produce multidimensional structures. *Psychological Reports*, 69, 991-997.

Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt, Brace Jovanovich College Publishers.

Edwards, M., & Aldous, I. R. (1996). Attitudes to and knowledge about elderly people: A comparative analysis of students of medicine, english, and computer science and their teachers. *Medical Education*, 30, 221-225.

Edwards-Hewitt, T., & Gray, J. J. (1995). Comparisons of measures of socioeconomic status between ethnic groups. *Psychological Reports*, 77, 699-702.

Ferraro, K. F. (1998). Is gerontology a multidisciplinary or an interdisciplinary field of study? Evidence from scholarly affiliations and educational programming. In K. F. Ferraro (Ed.), *Gerontology: Perspectives and issues* (2<sup>nd</sup> ed.) (pp. 373-387). New York: Springer.

Finnerty-Fried, P. (1982). Instruments for the assessment of attitudes toward older persons. *Measurement and Evaluation in Guidance*, 15(3), 201-209.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

Fiske, S. T. (1998). Stereotyping, prejudice, and discrimination. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed.) (pp. 357-411). NY: McGraw-Hill.

Florida Community College System, (2003). *The fact book: Report for the Florida Community College system*. [On-line]. Available: <http://www.dcc.firn.edu/MIS/factbook.htm>. (Last accessed February, 2004).

Ford, W. S. (1986). Favorable intergroup contact may not reduce prejudice: Inconclusive journal evidence. *Sociology and Social Research*, 70, 256-258.

Fresco, B. (1997). Attitudinal change among university student tutors. *Journal of Applied Social Psychology*, 27, 1277-1301.

Gaertner, S. L., Dovidio, J., Anastasio, P., Bachman, B., & Rust, M. (1993). The common in-group identity model: Recategorization and the reduction of intergroup bias. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (pp. 1-26). London: Wiley.

Gall, M., Borg, W., & Gall, P. (1996). *Educational research: An introduction*. White Plains, NY: Longman Publishers.

Gilligan, C. (1982). *In a different voice*. Cambridge, MA: Harvard University Press.

Gorelik, Y, Damron-Rodriguez, J., Funderburk, B., & Solomon, D. H. (2000). Undergraduate interest in aging: Is it affected by contact with older adults? *Educational Gerontology*, 26, 623-638.

Green, S. K. (1981). Attitudes and perceptions about the elderly: Current and future perspectives. *International Journal of Aging and Human Development*, 13, 99-119.

Hale, N. (1998). Effects of age and interpersonal contact on stereotyping of the elderly. *Current Psychology: Developmental, Learning, Personality*, 17(1), 28-47.

Harrigan, M. P., & Farmer, R. L. (1992). The myths and facts of aging. In R. L. Schneider & N. P. Kropf (Eds.), *Gerontological social work: Knowledge of service settings and special populations* (pp. 29-67), Chicago, IL: Nelson-Hall Publishers.

Hawkins, M. J. (1996). College students' attitudes toward elderly persons. *Educational Gerontology*, 22, 271-279.

Herek, G. M., & Capitanio, J. P. (1996). "Some of my best friends": Intergroup contact, concealable stigma, and heterosexuals' attitudes toward gay men and lesbians. *Personality and Social Psychology Bulletin*, 22, 412-424.

Hewstone, M., & Brown, R. (Eds.). (1986). *Contact and conflict in intergroup encounters*. Oxford: Basil Blackwell.

Hines, P. M., Preto, N. G., McGoldrick, M., Almeida, R., & Weltman, S. (1992). Intergenerational relations across cultures. *Families in Society: The Journal of Contemporary Human Services*, 73, 323-326.

Hodgson, L. G. (1992). Adult grandchildren and their grandparents: The enduring bond. *International Journal of Aging and Human Development*, 34, 209-225.

Hogg, M. (1987). Social identity and group cohesiveness. In J. C. Turner, M. A. Hogg, P. J. Oakes, S. D. Reicher, & M. S. Wetherall (Eds.), *Rediscovering the social group: A self-categorization theory* (pp. 89-116). Oxford: Blackwell.

Hogg, M., & Turner, J. C. (1987). Intergroup behaviour, self stereotyping and the salience of social categories. *British Journal of Social Psychology*, 26, 325-340.

Holmes, E. R., & Holmes, L. D. (1995). *Other cultures, elder years*. Thousand Oaks, CA: Sage.

Hooyman, N. & Kiyak, H. A. (1999). *Social gerontology: A multidisciplinary perspective* (5<sup>th</sup> ed.). Boston, MA: Allyn and Bacon.

Hummert, M., Garstka, T., Shaner, J., & Strahms, S. (1995). Age and typicality of judgements of stereotypes of the elderly: Perceptions of elderly and young adults. *International Journal of Aging and Human Development*, 37, 217-226.

Hurme, H. (1997). Cross-cultural differences in adolescents' perceptions of their grandparents. *International Journal of Aging and Human Development*, 44(3), 221-253.

Intrieri, R. C., Eye, A. V., & Kelly, J. A. (1995). The Aging Semantic Differential: A confirmatory factor analysis. *The Gerontologist*, 35(5), 616-621.

Kalavar, J. M. (2001). Examining ageism: Do male and female college students differ? *Educational Gerontology*, 27, 507-513.

Kane, M. N. (1999). Factors affecting social work students' willingness to work with elders with Alzheimer's disease. *Journal of Social Work Education*, 35(1), 71-85.



Kart, C. S. (1997). *The realities of aging* (5<sup>th</sup> ed.). Boston, MA: Allyn and Bacon.

Kelchner, E. S. (1999). Ageism's impact and effect on society: Not just a concern for the old. *Journal of Gerontological Social Work*, 32(4), 85-100.

Kephart, W. M. (1957). *Racial factors and urban law enforcement*. Philadelphia: University of Pennsylvania Press.

Kimmel, D. C. (1988). Ageism, psychology, and public policy. *American Psychologist*, 43, 175-178.

Kite, M. E., & Johnson, B. T. (1988). Attitudes toward older and young adults: A meta-analysis. *Psychology and Aging*, 3(3), 233-244.

Knox, V. J., Gekoski, W. L., & Johnson, E. (1986). Contact with and perceptions of the elderly. *The Gerontologist*, 26, 309-313.

Knox, V. J., Gekoski, W. L., & Kelly, L. E. (1995). The Age Group Evaluation and Description (AGED) Inventory: A new instrument for assessing stereotypes and attitudes toward age groups. *International Journal of Aging and Human Development*, 40(1), 31-55.

Kraus, S. J. (1995). Attitudes and the prediction of behavior: A meta-analysis of empirical literature. *Personality and Social Psychology Bulletin*, 21(1), 58-75.

Krosnick, J. A., & Alwin, D. F. (1989). Aging and susceptibility to attitudinal change. *Journal of Personality and Social Psychology*, 57(3), 416-425.

Kruglanski, A. W. (1989). *Lay epistemics and human knowledge: Cognitive and motivational bases*. New York: Plenum.

Kupetz, B. N. (1994). Ageism: A prejudice touching both young and old. *Day Care and Early Education*, Spring 1994, 34-37.

Laditka, J. N., & Laditka, S. B. (2001). Adult children helping older parents. *Research on Aging*, 23(4), 429-456.

Lemaine, G. (1974). Social differentiation and social originality. *European Journal of Social Psychology*, 4, 17-52.

Levinson, D. (Ed.). (1995). Intimacy. *Encyclopedia of Marriage and the Family*, 2, 402-407.

Levinson, D. J. (1986). A conception of adult development. *American Psychologist*, 41, 3-13.

Lutsky, N. S. (1980). Attitudes toward old age and elderly persons. In C. Eisdorfer (Ed.) *Annual review of gerontology and geriatrics* (pp. 287-336). New York: Springer.

Macionis, J. J. (2001). *Sociology* (8<sup>th</sup> ed.). Upper Sadler River, NJ: Prentice Hall.

MacNeil, R. D., Ramos, C., & Magafas, A. M. (1996). Age stereotyping among college students: A replication and expansion. *Educational Gerontology*, 22, 229-243.

Maddox, G. (Ed.). (1995). *The encyclopedia of aging*. New York: Springer.

Manis, J. & Melzer, B. (1978). *Symbolic interaction: A reader in social psychology* (3<sup>rd</sup> ed.). Boston: Allyn and Bacon.

Massino, F. J. (1993). An analysis of variables related to students' attitudes toward and knowledge of elderly persons ( Doctoral dissertation, Hofstra University, 1993). *Dissertation Abstract International*, 54, 05B.

McGowan, T. G. (1996). Ageism and discrimination. In J. Birren, (Ed.), *Encyclopedia of gerontology*, 1 (pp. 71-80). San Diego, CA: Academic Press, Inc.

McGuire, W. J. (1985). Attitudes and attitude change. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology*, 3(2). (pp. 3-12). Boston: McGraw-Hill.

Mertens, D. M. (1998). *Research methods in education and psychology*. Thousand Oaks, CA: Sage Publications.

Meshel, D. S. (1997). The contact hypothesis and the effects of intergenerational contact on adolescents' attitudes and stereotypes toward older people. (Doctoral dissertation, Texas Tech University, 1997). *Dissertation Abstracts International*, 58, 06B: 3370.

Messick, D. & Mackie, D. (1989). Intergroup relations. *Annual Review of Psychology*, 40. 45-81.

Miller, D. C., & Salkind, N. J. (2002). *Handbook of research design and social measurement* (6<sup>th</sup> ed.). London: Sage Publications.

Miller, N., & Harrington, H. J. (1992). Social categorization and in-group acceptance: Principles for the design and development of cooperative learning teams. In R. Hertz-Lazarowitz & N. Miller (Eds.), *Interaction in cooperative groups* (pp. 203-227). New York: Cambridge University Press.

Miller, R. S., & Lefcourt, H. M. (1982). The assessment of social intimacy. *Journal of Personality Assessment*, 46(5), 514-518.

Mills, R. B., Vermette, V., & Malley-Morrison, K. (1998). Judgments about elder abuse and college students' relationship with grandparents. *Gerontology and Geriatrics Education*, 19(2), 17-30.

Mitchell, B. (1997). The quality of the grandparent-young adult relationship: How does it relate to attitudes toward older persons and personal anxiety toward aging? (Doctoral dissertation, Adelphi University, 1997). *Dissertation Abstracts International*, 55, 07: 2137.

Mosher-Ashley, P. M., & Ball, P. (1999). Attitudes of college students toward elderly persons and their perceptions of themselves at age 75. *Educational Gerontology*, 25, 725-736.

Mutran, E., & Reitzes, D. C. (1984). Intergenerational support activities and well-being among the elderly: A convergence of exchange and symbolic interaction perspectives. *American Sociological Review*, 49, 117-130.

Nation, P. A. (1997). Factors associated with ageism: A survey of college students. (Doctoral dissertation, University of North Texas, 1997). *Dissertation Abstracts International*, 58, 03: 1123.

National Alliance for Caregiving (NAC) & American Association of Retired Persons (AARP). (1997). *Family care giving in the U.S.: Findings from a national survey*. Washington, DC: NAC and AARP.

Neuberg, S. L. (1994). Expectancy-confirmation process in stereotype-typed social encounters: The moderating goal of social goals. In M. P. Zanna & J. M. Olson (Eds.), *The psychology of prejudice: The Ontario symposium*, 7 (pp. 103-130), Hillsdale, NJ: Erlbaum

Newman, S., Faux, R., & Larimer, B. (1997). Children's view on aging: Their attitudes and values. *The Gerontologist*, 37(3), 412-417.

Ng, S. H. (1998). Social psychology in an ageing world: Ageism and intergenerational relations. *Asian Journal of Social Psychology*, 1, 99-116.

Nussbaum, J. F., Hummert, M.L., Williams, A., & Harwood, J. (1996). Communication and older adults. In B. R. Burleson (Ed.), *Communication yearbook*, 19 (pp. 1-47). Thousand Oaks, CA: Sage.

Nussbaum, J., Pecchioni, L., Robinson, J., & Thompson, T. (2000). *Communication and aging*. Mahwah, NJ: Lawrence Erlbaum Associates.

O'Hanlon, A. M., & Brookover, B. C. (2002). Assessing changes in attitudes about aging: Personal reflections and standardized measure. *Educational Gerontology*, 28, 711-725.

Osgood, C. E., Suci, G. J., & Tannebaum, P. H. (1957). *The measurement of meaning*. Urbana: University of Illinois Press.

Oskamp, S. (Ed.). (2000). *Reducing prejudice and discrimination*. Mahwah, NJ: Lawrence Erlbaum Associates.

Palmore, E. B. (1990). *Ageism: Negative and positive*. New York: Springer.

Palmore, E. B. (1999). *Ageism: Negative and positive*, (2<sup>nd</sup> ed.). New York: Springer.

Pettigrew, T. F. (1997). Generalised intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, 23, 173-185.

Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65-85.

Pettigrew, T. F., & Tropp, L. (2000). Does intergroup contact reduce prejudice? Recent-meta-analytical findings. In S. Oskamp (Ed.) *Reducing prejudice and discrimination* (pp. 93-114). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Pinquart, M., Wenzel, M., & Sorensen, S. (2000). Changes in attitudes among children and elderly adults in intergenerational group work. *Educational Gerontology*, 26, 523-540.

Powers, D. A., & Ellison, C. G. (1995). Interracial contact and black racial attitudes: The contact hypothesis and selectivity bias. *Social Forces*, 74, 205-226.

Puddifoot, J. (1997). Psychological reaction to perceived erasure of community boundaries. *The Journal of Social Psychology*, 137, 343-355.

Quadagno, J., & Street, D. (1996). *Aging for the twenty-first century: Readings in social gerontology*. NY: St. Martin's Press.

Reif, K., & Melich, A. (1991). *Euro-barometer 30: Immigrants and out-groups in Western Europe*, 1988. Ann Arbor, MI: Inter-University Consortium of Political and Social Research.

Reis, H. T., & Patrick, B. C. (1996). Attachment and intimacy: Component processes. In E. T. Higgins & A. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 523-563). New York: Guilford.

Rippl, S. (1995). Vorurteile und personliche Beziehungen zwischen Ost- und Westseusch. *Z. Soziol.*, 24, 273-283.

Robak, R. W., Griffin, P., Lacombe, M., & Quint, W. (2000). Perceptions of aging and their relation with age, death depression, and sex. *Perceptual and Motor Skills*, 90, 1179-1183.

Robert, R. & Mosher-Ashley, P. M. (2000). Factors influencing college students to choose careers working with elderly persons. *Educational Gerontology*, 26, 725-736.

Roberto, K., & Skoglund, R. R. (1996). Interactions with grandparents and great-grandparents: A comparison of activities, influences, and relationships. *International Journal of Aging and Human Development*, 43(2), 107-117.

Rose, A. (1962). *Human behavior and social processes*. Boston: Houghton Mifflin.

Rosencranz, H. A., & McNevin, T. (1969). A factor analysis of attitude toward the aged. *Gerontologist*, 9, 55-59.

Rothbart, M. & John, O. P. (1985). Social categorization and behavioral episodes: A cognitive analysis of the effects of intergroup contact. *Journal of Social Issues*, 41, 81-104.

Sachdev, I., & Bourhis, R. Y. (1987). Status differentials and intergroup behavior. *European Journal of Social Psychology*, 17, 277-293.

Sanders, G. F., & Pittman, J. F. (1988). Attitudes of youth toward known and general target elderly. *The Journal of Applied Gerontology*, 6(4), 464-475.

Sax, G. (1989). *Principles of educational and psychological measurement and evaluation* (3<sup>rd</sup> ed.). Belmont, CA: Wadsworth Publishing Company.

Scarberry, N., Ratcliff, C., Lord, C., Lanicek, D., & Deforges, D. (1997). Effects of individuating information on the generalization part of Allport's contact hypothesis. *Personality and Social Psychology Bulletin*, 23(12), 1291-1299.

Schaefer, M., & Olson, D. (1981). Assessing intimacy: The pair inventory. *Journal of Marital and Family Therapy*, 7, 47-60.

Schwalb, S. J., & Sedlacek, W. E. (1990). How college students' attitudes toward older people changed? *Journal of College Student Development*, 31, 127-131.

Schwartz, L. K., & Simmons, J. P. (2001). Contact quality and attitudes toward the elderly. *Educational Gerontology*, 27, 127-137.

Secord, P. E., & Backman, C. W., (1964). *Social psychology*. New York: McGraw-Hill.

Seefeldt, C. (1987). The effects of preschoolers' visits to a nursing home. *Gerontologist*, 27(2), 228-232.

Sharps, M. J., Price-Sharps, J. L., & Hanson, J. (1998). Attitudes of young adults toward older adults: Evidence from the United States and Thailand. *Educational Gerontology*, 24, 655-660.

Sheffield, M., Carey, J., Patenaude, W., & Lambert, M. J. (1995). An exploration of the relationship between interpersonal problems and psychological health. *Psychological Reports*, 76, 947-956.

Sheffler, S. J. (1998). Clinical placement and correlates affecting student attitudes toward the elderly. *Journal of Nursing Education*, 37(5), 216-218.

Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. W. (1961). *Intergroup contact and cooperation: The Robbers Cave experiment*. Norman, OK: University of Oklahoma Book Exchange.

Shoemaker, A. F., & Rowland, V. T. (1993). Do laboratory experiences change college students' attitudes toward the elderly? *Educational Gerontology*, 19, 295-309.

Sigelman, L. & Welch, S. (1993). The contact hypothesis revisited: Black-white interaction and positive racial attitudes. *Social Forces*, 71, 781-795.

Signorella, M. L., Bigler, R. S., & Liben, L. S. (1993). Developmental differences in children's gender schemata about others: A meta-analytic review. *Developmental Review*, 13, 147-183.

Silverstein, M., Parrott, T., & Bengston, V. (1995). Factors that predispose middle-aged sons and daughters to provide social support to older parents. *Journal of Marriage and the Family*, 57, 465-475.

Sims, V. M., & Patrick, J. R. (1936). Attitude toward the negro of northern and southern college students. *Journal of Social Psychology*, 7, 192-204.

Slotterback, C. S., & Saarnio, D. A. (1996). Attitudes toward older adults reported by young adults: Variation based on attitudinal task and attribute categories. *Psychology and Aging*, 11(4), 563-571.

Smith, C. B. (1994). Back and to the future: The intergroup contact hypothesis revisited. *Sociological Inquiry*, 64, 438-455.

Snyder, M., & Miene, P. K. (1994). Stereotyping of the elderly: A functional approach. *British Journal of Social Psychology*, 33, 63-82.

Stangor, C., Jonas, K., Stroebe, W., & Hewstone, M. (1996). Influence of student exchange on national stereotypes, attitudes, and perceived group variability. *European Journal of Social Psychology*, 26, 663-675.

Stephan, W. (1987). The contact hypothesis in intergroup relations. *Review of Personality and Social Psychology*, 9, 13-40.

Stephan, W. (1999). *Reducing prejudice and stereotyping in schools*. NY: Teachers College Press.

Stephan, W. & Stephan, C. W. (1996). *Intergroup relations*. Boulder, CO: Westview Press, Inc.

Stephan, W. & Stephan C. W. (2000). An integrated threat theory of prejudice. In S. Oskamp (Ed.), *Reducing prejudice and discrimination* (pp. 23-46). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Stephan, W. & Stephan, C. W. (2001). *Improving intergroup relations*. Thousand Oaks, CA: Sage Publications, Inc.

Sunar, D. G. (1988). Attitudes of Turkish students toward elderly relatives. *Journal of Cross-Cultural Gerontology*, 25(5), 41-52.

Tabachnick, B. G., & Fidell, L. (2001). *Using multivariate statistics*. Boston: Allyn and Bacon.

Tajfel, H. (1969). Cognitive aspects of prejudice. *Journal of Social Issues*, 25, 79-97.

Tajfel, H. (Ed.). (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. London: Academic Press.

Tajfel, H. (1982). *Social identity and intergroup relations*. Cambridge: Cambridge University Press.

Tajfel, H., Billig, M., Bundy, R. F., & Flament, C. (1971). Social categorization and intergroup behavior. *European Journal of Social Psychology*, 1, 149-177.

Tajfel, H. & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 262-273). Chicago: Nelson-Hall.

Tajfel, H. & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (2<sup>nd</sup> ed.) (pp. 7-24). Chicago: Nelson-Hall.

Tanksley, R. W., (1995). College attitudes toward older adults and the relationship of spiritual well-being, race, gender, and knowledge about aging (Doctoral dissertation, The Florida State University, 1995) *Dissertation Abstract International*, 56, 04.

Thorslund, M., & Parker, M. (1995). Strategies for an ageing population: Expanding the priorities discussion. *Ageing and Society*, 15, 199-217.

Triandis, H. C. & Trafimow, D. (2001). Culture and its implications for intergroup behavior. In R. Brown & S. L. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 451-474). Oxford: Blackwell Publishers Ltd.

Turner, J., (1975). Social comparison and social identity: Some prospects for intergroup behaviour. *European Journal of Social Psychology*, 5, 5-34.

Turner, J. (1985). Social categorization and self-concept: A social cognitive theory of group behavior. In E. Lawler (Ed.), *Advances in group processes*, 2. (pp. 77-122).

Turner, J. & Giles, H. (Eds.). (1981). *Intergroup behaviour*. Oxford, UK: Blackwell.

Turner, J., Hogg, M., Oakes, P., Reicher, S., & Wetherall, M. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, UK: Blackwell.

Turner, J. & Reynolds, K. (2001). The social identity perspective in intergroup relations: Theories, themes, and controversies. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 133-152). Malden, MA: Blackwell Publishers Inc.

U.S. Census Bureau. (2000). *QuickFacts*. [On-line]. Available: <http://quickfacts.census.gov>. (Last accessed May, 2003).

University of North Florida Office of Institutional Research. (2002). *Fall 2002: All students* (student body profile data). [On-line]. Available: [http://www.unf.edu/dept/inst-research/fall\\_2002.htm](http://www.unf.edu/dept/inst-research/fall_2002.htm). (Last accessed May, 2003).

Vanneman, R. D., & Pettigrew, T. F. (1972). Race and relative deprivation in the United States. *Race*, 13, 461-486.



Vasil, L. & Wass, H. (1993). Portrayal of the elderly in the media: A literature review and implications for educational gerontologists. *Educational Gerontology*, 19, 71-85.

Vernon, A. E. (1999). Designing for change: Attitudes toward the elderly and intergenerational programming. *Child and Youth Services*, 20(1, 2), 161-173.

Visser, P., & Krosnick, J. A. (1998). Development of attitude strength over the life cycle: Surge and decline. *Journal of Personality and Social Psychology*, 75(6), 1389-1410.

Weaver, J. W. (1999). Special issue: "Aging education": Preparing for the 21<sup>st</sup> century introduction. *Educational Gerontology*, 25, 475-579.

Werth, J. L., & Lord, C. G. (1992). Previous conceptions of the typical group member and the contact hypothesis. *Basic Applied Social Psychology*, 13, 351-369.

Wilder, D. (1986). Social categorization: Implications for creation and reduction of intergroup bias. In L. Berkowitz (Ed.) *Advances in experimental psychology*, 19 (pp. 291-355). San Diego, CA: Academic Press.

Wilkinson, J. A., & Ferraro, K. F. (2002). Thirty years of ageism research. In T. D. Nelson (Ed.), *Ageism*, (pp. 340-358). Cambridge, MA: The MIT Press.

Williams, A. & Giles, H. (1998). Communication of ageism. In M. Hecht (Ed.), *Communicating prejudice* (pp. 136-160). Thousand Oaks, CA: Sage Publications.

Wiener, D. M., Walkley, R., & Cook, S. W. (1955). *Human relations in interracial housing: A study of the contact hypothesis*. Minneapolis: University of Minnesota Press.

Wittig, M. A., & Grant-Thompson, S. (1998). The utility of Allport's conditions of intergroup contact for predicting perceptions of improved racial attitudes and beliefs. *Journal of Social Issues*, 54(4), 795-812.

Wood, P. B., & Sonleitner, N. (1996). The effect of childhood interracial contact on adult anti-black prejudice. *International Journal of Intercultural Relations*, 20, 1-17.

Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. Unpublished manuscript, University of California, Santa Cruz.

Zandi, T, Mirle, J, & Jarvis, P. (1990). Children's attitudes toward elderly individuals: A comparison of two ethnic groups. *International Journal of Aging and Human Development*, 30(3), 161-174.

## APPENDIX A INFORMED CONSENT (ATTACHED TO SURVEY)

### INFORMED CONSENT

**Please read the following consent information carefully before deciding whether to participate in this study.**

**Study title:** Young Adult' Attitudes Toward Older Adults and The Influence of Contact With a "most familiar" Older Adult, Intimacy, and Perceiver's Characteristics

**Purpose of the research:** The purpose of this study is to examine interpersonal attitudes and perceptions between individuals who differ generationally. It is part of a doctoral dissertation being conducted by Michael Malec under the supervision of University of Florida Professor, James Archer Jr., Ph.D. Mr. Malec is a doctoral candidate in Counselor Education at the University of Florida.

**What will you be asked to do in the study:** If you agree to participate, you will be asked to complete a 7 page survey designed to provide information about cross-age perceptions and attitudes (a) toward older individuals age 65 years or older, in general, and (b) toward the one older adult in your life whom you identify as being the "most familiar" to you. Other demographic questions about you (e.g., your age, race) and the "most familiar" older adult (e.g., the nature of your relationship, amount of contact you have) are also included in the survey. As arranged with your professor, ample time will be given you in-class to complete the survey. If you decide not to be a study participant, you will be allowed to leave the classroom during the time while surveys are being completed if you choose to.

**Time required:** 30 minutes (during regular class-time)

**Risks and benefits:** There are no known or suspected risks of participating in this study. No immediate benefits are known or suspected either. Ultimately, results from the study will add to the existing body of knowledge on cross-age relations.

**Compensation:** No compensation is being awarded for participant involvement in the study.

**Confidentiality:** All survey results/answers will be held in strictest confidence and your identity will be kept confidential to the extent provided by law. Participation in the study is anonymous; no names will be made known, used in a report, or be required when completing the survey.

**Voluntary participation:** Participation in this study is totally voluntary. There is no penalty for not participating. Also, you do not have to answer any question you do not wish to answer. In addition, you have the right to withdraw from the study at anytime without consequences.

**Whom to contact if you have questions during, or after, the study:**

Michael Malec (Ph.D. candidate), University of North Florida, Jacksonville, FL, at (904) 620-2602, Dr. James Archer Jr. (supervisor), 1212 Norman Hall, University of Florida, at (352) 392-0433.

**Whom to contact about your rights as a research participant in this study:** UFIRB Office, University of Florida, Box 11250, Gainesville, FL 32611; or by telephone at (352) 392-0433.

**Agreement:** I HAVE READ THE PROCEDURE DESCRIBED ABOVE. I VOLUNTARILY AGREE TO PARTICIPATE IN THE STUDY AND I HAVE RECEIVED A COPY OF THIS DESCRIPTION.

\_\_\_\_\_  
Your Signature

\_\_\_\_\_  
Today's Date

\_\_\_\_\_  
Michael Malec, Ed.S., M.S.W.  
Principal Investigator/Ph.D. Candidate

James Archer, Ph.D.  
Supervisor/Professor  
UF Department of Counselor Education

APPENDIX B  
COMPLETE STUDY SURVEY (FORM A)

**INTERPERSONAL RELATIONS SURVEY (FORM A)**

Thank you for participating in this research study. The responses you give to the following questions will help us better understand the interpersonal relations between individuals differing generationally. Your opinions are very important to us, so please answer each item as completely and honestly as possible. Remember, there are no right or wrong "answers" to these questions, and all your responses will remain confidential and anonymous. Also, be sure that you answer all of the questions, and provide 1 answer only per question/item.

Please answer questions 1- 6 by bubbling in the number which corresponds to your answer, or filling in the blank.

1. **What is your sex?** (1) Male (2) Female

2. **Your age?** \_\_\_\_\_

3. **Your race/ethnicity?** (1 answer only, please--- which group do you MOST identify with?)

(1) White (4) Asian or Pacific Islander

(2) African American or Black (5) Other -- (if so, what?) \_\_\_\_\_

(3) Hispanic

4. **Which of the following is true?**

(1) I'm currently a student at a community college (FCCJ, for example).

(2) I'm currently a student at the University of North Florida.

5. **To the best of your knowledge, what is the highest level of education completed by your father?**

(1) graduate degree from college

(2) bachelor's degree/4-year degree from college

(3) partial college training (completed at least 1 year of college)

(4) high school graduate

(5) never graduated from high school

6. To the best of your knowledge, what is the highest level of education completed by your mother?

- (1) graduate degree from college
- (2) bachelor's degree/4-year degree from college
- (3) partial college training (completed at least 1 year of college)
- (4) a high school graduate
- (5) never graduated from high school

7. Have you ever lived in a household in which a person age 65 years or older also was living at the time?

- (1) Yes      (2) No (if "No", skip question 8)

8. For how long? *(If this is a situation that has happened to you more than once, provide the total amount of time spent living in the same household with an older adult)*

**FOR EXAMPLE:** If you lived in a household with an older adult (65 years or older):

Only once for a period of 4 months, answer 0 years and 4 months below.

Once for 6 months and another time for 1 year and 9 months, answer 2 years and 3 months below. Now, answer below.

\_\_\_ years and \_\_\_ months

### **WHAT ARE YOUR PERCEPTIONS ABOUT THE GROUP 'OLDER ADULTS IN GENERAL' (I.E., ALL PERSONS AGE 65 YEARS OR OLDER)?**

Listed on the next page are a series of polar adjectives accompanied by a scale. Place a check mark along the scale at a point which in your judgment best describes '**older adults in general**' (i.e., all individuals age 65 years or older). Make each item a separate and independent judgment. Do not worry or puzzle over individual items. Do not try to remember how you have marked earlier items even though they may seem to have been similar. It is your first impression or immediate feeling about each item want.

**FOR EXAMPLE:** For the first set of adjectives, if you believe 'older adults in general' (i.e., all age 65 years or older) are *very progressive*, your scale may look like this:

	very much so	somewhat	neutral or equal	somewhat	very much so	
Progressive	<u>X</u>	___	___	___	___	Old-Fashioned

If, you believe they are *very old-fashioned*, your scale may look like this:

	<i>very much so</i>	<i>somewhat</i>	<i>neutral or equal</i>	<i>somewhat</i>	<i>very much so</i>	
Progressive	—	—	—	—	<u>X</u>	Old-Fashioned

If, you believe they are *equally progressive and old-fashioned*, your scale may look like this:

	<i>very much so</i>	<i>somewhat</i>	<i>neutral or equal</i>	<i>somewhat</i>	<i>very much so</i>	
Progressive	—	—	<u>X</u>	—	—	Old-Fashioned

\*\*\* Remember, for each item below you are rating OLDER ADULTS IN GENERAL (all persons age 65 or older).

	<i>very much so</i>	<i>somewhat</i>	<i>neutral or equal</i>	<i>somewhat</i>	<i>very much so</i>	
Progressive	—	—	—	—	—	Old-Fashioned
Consistent	—	—	—	—	—	Inconsistent
Independent	—	—	—	—	—	Dependent
Rich	—	—	—	—	—	Poor
Generous	—	—	—	—	—	Selfish
Productive	—	—	—	—	—	Unproductive
Busy	—	—	—	—	—	Idle
Secure	—	—	—	—	—	Insecure
Strong	—	—	—	—	—	Weak
Healthy	—	—	—	—	—	Unhealthy
Active	—	—	—	—	—	Passive
Handsome	—	—	—	—	—	Ugly
Cooperative	—	—	—	—	—	Uncooperative
Optimistic	—	—	—	—	—	Pessimistic
Satisfied	—	—	—	—	—	Dissatisfied
Expectant	—	—	—	—	—	Resigned
Flexible	—	—	—	—	—	Inflexible
Hopeful	—	—	—	—	—	Dejected
Organized	—	—	—	—	—	Disorganized
Happy	—	—	—	—	—	Sad
Friendly	—	—	—	—	—	Unfriendly
Neat	—	—	—	—	—	Untidy
Trustful	—	—	—	—	—	Suspicious
Self-Reliant	—	—	—	—	—	Dependent
Liberal	—	—	—	—	—	Conservative
Certain	—	—	—	—	—	Uncertain
Tolerant	—	—	—	—	—	Intolerant

	<i>very</i> <i>much so</i>		<i>somewhat</i>	<i>neutral</i> <i>or equal</i>		<i>somewhat</i>	<i>very</i> <i>much so</i>		
Pleasant	—	—	—	—	—	—	—	—	Unpleasant
Ordinary	—	—	—	—	—	—	—	—	Eccentric
Aggressive	—	—	—	—	—	—	—	—	Defensive
Exciting	—	—	—	—	—	—	—	—	Dull
Decisive	—	—	—	—	—	—	—	—	Indecisive

**WHAT IS YOUR RELATIONSHIP LIKE WITH THE "MOST FAMILIAR" OLDER ADULT AGE 65 YEARS OR OLDER IN YOUR LIFE?**

A number of phrases are listed below describing the kind of relationships people have with others. Indicate by circling the appropriate letters in the answer field, how you would describe your relationship with the one person age 65 years or older in your life whom you are the most "most familiar" with. This "**most familiar**" older adult may be that person with whom, in some combination, you share the most time and have the greatest emotional bond with. This person can be male or female and family member (but not a parent of yours) or non-family member. While it is not necessary to specify the name of this individual please indicate his or her sex in question 1.

**1. Sex of the "most familiar" older adult age 65 year or older?**

(1) Male    (2) Female

For the following, circle the letter which best answers each question as it pertains to your relationship with the "most familiar" older adult you've identified.

	<i>Very Rarely</i>		<i>Some of The Time</i>		<i>Almost Always</i>
When you have leisure time how often do you choose to spend it with him/her alone?	A	B	C	D	E
How often do you keep very personal information to yourself and do not share it with him/her?	A	B	C	D	E
How often do you show him or her affection?	A	B	C	D	E
How often do you confide very personal information to him/her?	A	B	C	D	E
How often are you able to understand his/her feelings?	A	B	C	D	E
How often do you feel close to him/her?	A	B	C	D	E



	<i>Not Much</i>		<i>A Little</i>		<i>A Great Deal</i>
How much do you like to spend time alone with him/her?	A	B	C	D	E
How much do you feel like being encouraging and supportive to him/her when he/she is unhappy?	A	B	C	D	E
How close do you feel to him/her most of the time?	A	B	C	D	E
How important is it to you to listen to his/her personal disclosures?	A	B	C	D	E
How satisfying is your relationship with him/her?	A	B	C	D	E
How affectionate do you feel towards him/her?	A	B	C	D	E
How important is it to you that he/she understand your feelings?	A	B	C	D	E
How much damage is caused by a typical disagreement in your relationship with him/her?	A	B	C	D	E
How important is it to you that he/she be encouraging and supportive to you when you are unhappy?	A	B	C	D	E
How important is it to you that he/she show you affection?	A	B	C	D	E
How important is your relationship with him/her in your life?	A	B	C	D	E

You have just described the relationship you have with the "most familiar" older adult (age 65 years or over) in your life. How long have you known this individual?

\_\_\_\_\_ years and \_\_\_\_\_ months

What is the primary basis of your relationship with them?

- |   |                                     |
|---|-------------------------------------|
| (1) my grandparent                        | (4) a neighbor                      |
| (2) a relative, other than my grandparent | (5) a co-worker                     |
| (3) a friend                              | (6) other (if "other", what?) _____ |

Typically, over a one month period (30 days), how many days have you had FACE-TO-FACE contact/interaction with the "most familiar" individual?

\_\_\_\_\_ days (write in a number from 1 to 30)

Typically, over a one month period (30 days), how many days have you had either face-to-face, written/e-mail, or telephone contact with this individual?

\_\_\_\_\_ days (write in a number from 1 to 30)

**WHAT ARE YOUR PERCEPTIONS ABOUT THE "MOST FAMILIAR" OLDER ADULT (AGE 65 YEARS OR OLDER) IN YOUR LIFE?**

The "most familiar" older adult in your life (age 65 years or older) may be that person with whom, in some combination, you share the most time and/or have the greatest emotional bond with. This person may be male or female and family member (but not a parent of yours) or non-family member.

Listed below are a series of polar adjectives accompanied by a scale. Place a check mark along the scale at a point which in your judgment best describes the "most familiar" older adult age 65 years or older in your life. Make each item a separate and independent judgment. Do not worry or puzzle over individual items. Do not try to remember how you have marked earlier items even though they may seem to have been similar. It is your first impression or immediate feeling about each item we want.

**FOR EXAMPLE:** For the first set of adjectives, if you believe the person you identify as 'the most familiar' older adult in your life (i.e., age 65 years or older) is *very progressive*, your scale may look like this:

	very much so	somewhat	neutral or equal	somewhat	very much so	
Progressive	<u>X</u>	___	___	___	___	Old-Fashioned

If, you believe he or she is *very old-fashioned*, your scale may look like this:

	very much so	somewhat	neutral or equal	somewhat	very much so	
Progressive	___	___	___	___	<u>X</u>	Old-Fashioned

If, you believe he or she is *equally progressive and old-fashioned*, your scale may look like this:

	very much so	somewhat	neutral or equal	somewhat	very much so	
Progressive	___	___	<u>X</u>	___	___	Old-Fashioned

\*\* Remember again, for each item below, you are rating that person you have identified as THE  
"most familiar" OLDER ADULT IN YOUR LIFE (age 65 years or older).

	<i>very</i> <i>much so</i>	<i>somewhat</i>	<i>neutral</i> <i>or equal</i>	<i>somewhat</i>	<i>very</i> <i>much so</i>	
Progressive	___	___	___	___	___	Old-Fashioned
Consistent	___	___	___	___	___	Inconsistent
Independent	___	___	___	___	___	Dependent
Rich	___	___	___	___	___	Poor
Generous	___	___	___	___	___	Selfish
Productive	___	___	___	___	___	Unproductive
Busy	___	___	___	___	___	Idle
Secure	___	___	___	___	___	Insecure
Strong	___	___	___	___	___	Weak
Healthy	___	___	___	___	___	Unhealthy
Active	___	___	___	___	___	Passive
Handsome	___	___	___	___	___	Ugly
Cooperative	___	___	___	___	___	Uncooperative
Optimistic	___	___	___	___	___	Pessimistic
Satisfied	___	___	___	___	___	Dissatisfied
Expectant	___	___	___	___	___	Resigned
Flexible	___	___	___	___	___	Inflexible
Hopeful	___	___	___	___	___	Dejected
Organized	___	___	___	___	___	Disorganized
Happy	___	___	___	___	___	Sad
Friendly	___	___	___	___	___	Unfriendly
Neat	___	___	___	___	___	Untidy
Trustful	___	___	___	___	___	Suspicious
Self-Reliant	___	___	___	___	___	Dependent
Liberal	___	___	___	___	___	Conservative
Certain	___	___	___	___	___	Uncertain
Tolerant	___	___	___	___	___	Intolerant
Pleasant	___	___	___	___	___	Unpleasant
Ordinary	___	___	___	___	___	Eccentric
Aggressive	___	___	___	___	___	Defensive
Exciting	___	___	___	___	___	Dull
Decisive	___	___	___	___	___	Indecisive

**YOUR ADDITIONAL COMMENTS**

**\*\*If you'd like, please use the bottom of this page (and back of this page, if needed) to share any additional comments you have about your relationship with the "most familiar" older adult. How, for example, has this relationship affected how you view older adults in general?**

**Also, if you have lived in a household in which at least one older adult was living at the time, what effect, if any, did the experience have on your perceptions/attitudes about older adults in general?**

APPENDIX C  
COMPLETE STUDY SURVEY (FORM B)

**INTERPERSONAL RELATIONS SURVEY (FORM B)**

Thank you for participating in this research study. The responses you give to the following questions will help us better understand the interpersonal relations between individuals differing generationally. Your opinions are very important to us, so please answer each item as completely and honestly as possible. Remember, there are no right or wrong "answers" to these questions, and all your responses will remain confidential and anonymous. Also, be sure that you answer all of the questions, and provide 1 answer only per question/item.

Please answer questions 1- 6 by bubbling in the number which corresponds to your answer, or filling in the blank.

1. **What is your sex?** (1) Male (2) Female
  
2. **Your age?** \_\_\_\_\_
  
3. **Your race/ethnicity?** (1 answer only, please--- which group do you MOST identify with?)  

(1) White	(4) Asian or Pacific Islander
(2) African American or Black	(5) Other -- (if so, what?) _____
(3) Hispanic	
  
4. **Which of the following is true?**  

(1) I'm currently a student at a community college (FCCJ, for example).
(2) I'm currently a student at the University of North Florida.
  
5. **To the best of your knowledge, what is the highest level of education completed by your father?**  

(1) graduate degree from college
(2) bachelor's degree/4-year degree from college
(3) partial college training (completed at least 1 year of college)
(4) high school graduate
(5) never graduated from high school

6. To the best of your knowledge, what is the highest level of education completed by your mother?

- (1) graduate degree from college
- (2) bachelor's degree/4-year degree from college
- (3) partial college training (completed at least 1 year of college)
- (4) a high school graduate
- (5) never graduated from high school

7. Have you ever lived in a household in which a person age 65 years or older also was living at the time?

- (1) Yes
- (2) No (if "No", skip question 8)

8. For how long? (If this is a situation that has happened to you more than once, provide the total amount of time spent living in the same household with an older adult)

FOR EXAMPLE: If you lived in a household with an older adult (65 years or older):

Only once for a period of 4 months, answer 0 years and 4 months below.

Once for 6 months and another time for 1 year and 9 months, answer 2 years and 3 months below. Now, answer below.

\_\_\_ years and \_\_\_ months

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### **WHAT ARE YOUR PERCEPTIONS ABOUT THE "MOST FAMILIAR" OLDER ADULT (AGE 65 YEARS OR OLDER) IN YOUR LIFE?**

The "most familiar" older adult in your life (age 65 years or older) may be that person with whom, in some combination, you share the most time and/or have the greatest emotional bond with. This person may be male or female and family member (but not a parent of yours) or non-family member.

Listed below are a series of polar adjectives accompanied by a scale. Place a check mark along the scale at a point which in your judgment best describes the "most familiar" older adult age 65 years or older in your life. Make each item a separate and independent judgment. Do not worry or puzzle over individual items. Do not try to remember how you have marked earlier items even though they may seem to have been similar. It is your first impression or immediate feeling about each item we want.

FOR EXAMPLE: For the first set of adjectives, if you believe the person you identify as 'the most familiar' older adult in your life (i.e., age 65 years or older) is *very progressive*, your scale may look like this:

	very much so	somewhat	neutral or equal	somewhat	very much so	
Progressive	<u>X</u>	___	___	___	___	Old-Fashioned

If, you believe he or she is *very old-fashioned*, your scale may look like this:

	<i>very much so</i>	<i>somewhat</i>	<i>neutral or equal</i>	<i>somewhat</i>	<i>very much so</i>	
Progressive	___	___	___	___	<u>X</u>	Old-Fashioned

If, you believe he or she is *equally progressive and old-fashioned*, your scale may look like this:

	<i>very much so</i>	<i>somewhat</i>	<i>neutral or equal</i>	<i>somewhat</i>	<i>very much so</i>	
Progressive	___	___	<u>X</u>	___	___	Old-Fashioned

\*\* Remember again, for each item below, you are rating that person you have identified as **THE "MOST FAMILIAR" OLDER ADULT IN YOUR LIFE** (age 65 years or older).

	<i>very much so</i>	<i>somewhat</i>	<i>neutral or equal</i>	<i>somewhat</i>	<i>very much so</i>	
Progressive	___	___	___	___	___	Old-Fashioned
Consistent	___	___	___	___	___	Inconsistent
Independent	___	___	___	___	___	Dependent
Rich	___	___	___	___	___	Poor
Generous	___	___	___	___	___	Selfish
Productive	___	___	___	___	___	Unproductive
Busy	___	___	___	___	___	Idle
Secure	___	___	___	___	___	Insecure
Strong	___	___	___	___	___	Weak
Healthy	___	___	___	___	___	Unhealthy
Active	___	___	___	___	___	Passive
Handsome	___	___	___	___	___	Ugly
Cooperative	___	___	___	___	___	Uncooperative
Optimistic	___	___	___	___	___	Pessimistic
Satisfied	___	___	___	___	___	Dissatisfied
Expectant	___	___	___	___	___	Resigned
Flexible	___	___	___	___	___	Inflexible
Hopeful	___	___	___	___	___	Dejected
Organized	___	___	___	___	___	Disorganized
Happy	___	___	___	___	___	Sad
Friendly	___	___	___	___	___	Unfriendly
Neat	___	___	___	___	___	Untidy
Trustful	___	___	___	___	___	Suspicious

	<i>very much so</i>	<i>somewhat</i>	<i>neutral or equal</i>	<i>somewhat</i>	<i>very much so</i>	
Self-Reliant	—	—	—	—	—	Dependent
Liberal	—	—	—	—	—	Conservative
Certain	—	—	—	—	—	Uncertain
Tolerant	—	—	—	—	—	Intolerant
Pleasant	—	—	—	—	—	Unpleasant
Ordinary	—	—	—	—	—	Eccentric
Aggressive	—	—	—	—	—	Defensive
Exciting	—	—	—	—	—	Dull
Decisive	—	—	—	—	—	Indecisive

**WHAT IS YOUR RELATIONSHIP LIKE WITH THE "MOST FAMILIAR" OLDER  
ADULT AGE 65 YEARS OR OLDER IN YOUR LIFE?**

A number of phrases are listed below describing the kind of relationships people have with others. Indicate by circling the appropriate letters in the answer field, how you would describe your relationship with the one person age 65 years or older in your life whom you are the most "most familiar" with. This "most familiar" older adult may be that person with whom, in some combination, you share the most time and have the greatest emotional bond with. This person can be male or female and family member (but not a parent of yours) or non-family member. While it is not necessary to specify the name of this individual please indicate his or her sex in question 1.

**1. Sex of the "most familiar" older adult age 65 year or older?**

(1) Male    (2) Female

For the following, circle the letter which best answers each question as it pertains to your relationship with the "most familiar" older adult you've identified.

	<i>Very Rarely</i>		<i>Some of The Time</i>		<i>Almost Always</i>
<b>When you have leisure time how often do you choose to spend it with him/her alone?</b>	A	B	C	D	E
<b>How often do you keep very personal information to yourself and do not share it with him/her?</b>	A	B	C	D	E
<b>How often do you show him or her affection?</b>	A	B	C	D	E



	<i>Very Rarely</i>	<i>Some of The Time</i>			<i>Almost Always</i>
How often to you confide very personal information to him/her?	A	B	C	D	E
How often are you able to understand his/her feelings?	A	B	C	D	E
How often do you feel close to him/her?	A	B	C	D	E
	<i>Not Much</i>	<i>A Little</i>			<i>A Great Deal</i>
How much do you like to spend time alone with him/her?	A	B	C	D	E
How much do you feel like being encouraging and supportive to him/her when he/she is unhappy?	A	B	C	D	E
How close do you feel to him/her most of the time?	A	B	C	D	E
How important is it to you to listen to his/her personal disclosures?	A	B	C	D	E
How satisfying is your relationship with him/her?	A	B	C	D	E
How affectionate do you feel towards him/her?	A	B	C	D	E
How important to you is it that he/she understand your feelings?	A	B	C	D	E
How much damage is caused by a typical disagreement in your relationship with him/her?	A	B	C	D	E
How important is it to you that he/she be encouraging and supportive to you when you are unhappy?	A	B	C	D	E
How important is it to you that he/she show you affection?	A	B	C	D	E
How important is your relationship with him/her in your life?	A	B	C	D	E

You have just described the relationship you have with the "most familiar" older adult (age 65 years or over) in your life. How long have you known this individual?

\_\_\_\_\_ years and \_\_\_\_\_ months

What is the primary basis of your relationship with them?

- (1) my grandparent (4) a neighbor  
 (2) a relative, other than my grandparent (5) a co-worker  
 (3) a friend (6) other (if "other", what?) \_\_\_\_\_

Typically, over a one month period (30 days), how many days have you had FACE-TO-FACE contact/interaction with the "most familiar" individual?

\_\_\_\_\_ days (write in a number from 1 to 30)

Typically, over a one month period (30 days), how many days have you had either face-to-face, written/e-mail, or telephone contact with this individual?

\_\_\_\_\_ days (write in a number from 1 to 30)

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**FOR EXAMPLE:** For the first set of adjectives, if you believe 'older adults in general' (i.e., all age 65 years or older) are *very progressive*, your scale may look like this:

	<i>very much so</i>	<i>somewhat</i>	<i>neutral or equal</i>	<i>somewhat</i>	<i>very much so</i>	
Progressive	<u>  X  </u>	_____	_____	_____	_____	Old-Fashioned

If, you believe they are *very old-fashioned*, your scale may look like this:

	<i>very much so</i>	<i>somewhat</i>	<i>neutral or equal</i>	<i>somewhat</i>	<i>very much so</i>	
Progressive	_____	_____	_____	_____	<u>  X  </u>	Old-Fashioned

If, you believe they are *equally progressive and old-fashioned*, your scale may look like this:

	<i>very much so</i>	<i>somewhat</i>	<i>neutral or equal</i>	<i>somewhat</i>	<i>very much so</i>	
Progressive	_____	_____	<u>  X  </u>	_____	_____	Old-Fashioned

\*\*\* Remember, for each item below you are rating OLDER ADULTS IN GENERAL (all persons age 65 or older).

	<i>very much so</i>	<i>somewhat</i>	<i>neutral or equal</i>	<i>somewhat</i>	<i>very much so</i>	
Progressive	___	___	___	___	___	Old-Fashioned
Consistent	___	___	___	___	___	Inconsistent
Independent	___	___	___	___	___	Dependent
Rich	___	___	___	___	___	Poor
Generous	___	___	___	___	___	Selfish
Productive	___	___	___	___	___	Unproductive
Busy	___	___	___	___	___	Idle
Secure	___	___	___	___	___	Insecure
Strong	___	___	___	___	___	Weak
Healthy	___	___	___	___	___	Unhealthy
Active	___	___	___	___	___	Passive
Handsome	___	___	___	___	___	Ugly
Cooperative	___	___	___	___	___	Uncooperative
Optimistic	___	___	___	___	___	Pessimistic
Satisfied	___	___	___	___	___	Dissatisfied
Expectant	___	___	___	___	___	Resigned
Flexible	___	___	___	___	___	Inflexible
Hopeful	___	___	___	___	___	Dejected
Organized	___	___	___	___	___	Disorganized
Happy	___	___	___	___	___	Sad
Friendly	___	___	___	___	___	Unfriendly
Neat	___	___	___	___	___	Untidy
Trustful	___	___	___	___	___	Suspicious
Self-Reliant	___	___	___	___	___	Dependent
Liberal	___	___	___	___	___	Conservative
Certain	___	___	___	___	___	Uncertain
Tolerant	___	___	___	___	___	Intolerant
Pleasant	___	___	___	___	___	Unpleasant
Ordinary	___	___	___	___	___	Eccentric
Aggressive	___	___	___	___	___	Defensive
Exciting	___	___	___	___	___	Dull
Decisive	___	___	___	___	___	Indecisive

**YOUR ADDITIONAL COMMENTS**

**\*\*If you'd like, please use the bottom of this page (and back of this page, if needed) to share any additional comments you may have about your relationship with the "most familiar" older adult. How, for example, has this relationship affected how you view older adults in general?**

Also, if you have lived in a household in which at least one older adult was living at the time, what effect, if any, did the experience have on your perceptions/attitudes about older adults in general?

## BIOGRAPHICAL SKETCH

Michael J. Malec was born in Union City, Pennsylvania, a small rural light-industrial/farming community. He is the son of a blue-collar laborer who had an eighth grade education only, and a stay-at-home mother. In 1974, Mr. Malec had the distinction of becoming the first in his family to attend college. Four years later he became the first to graduate, earning a bachelor's degree in psychology from Edinboro University of Pennsylvania.

Today, more than 25 years later, education and learning continue to highlight Mr. Malec's life and career. Since earning his initial degree in 1978, he has been spent much of his time in higher education as a graduate student, community college adjunct instructor, and university counseling center personal counselor.

In 1987, Mr. Malec received a master's degree in clinical social work from Florida State University. More recently, in 2005, he completed the requirements for his Ph.D. degree in counselor education.

Mr. Malec currently lives in Jacksonville, Florida, and works at the University of North Florida (UNF) Counseling Center. There he provides individual, couples, and group counseling services to the university's students. He is now the senior counselor on staff at the center after first being hired in 1990. It was in that same year that Mr. Malec also became licensed by the State of Florida as a Clinical Social Worker. Prior to UNF, Mr. Malec practiced in a

variety of different mental health settings (i.e., community mental health, an inpatient psychiatric unit at a large metropolitan medical center, private practice, and outpatient substance abuse counseling) gaining invaluable clinical and professional counseling experience.

Mr. Malec, when not in his role as counselor or graduate student, enjoys sports of all kinds (both as a participant and spectator), "surfing the web," reading, and movies. His professional goals include becoming a full-time college professor.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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James Archer Jr., Chair  
Professor of Counselor Education

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Ellen Amatea  
Professor of Counselor Education

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James Pitts  
Associate Professor of Counselor Education

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M. David Miller  
Professor of Educational Psychology

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 2005

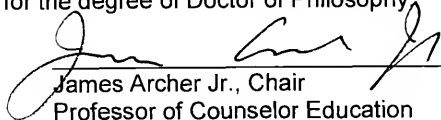
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Dean, College of Education

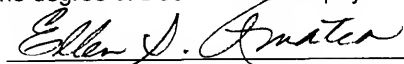
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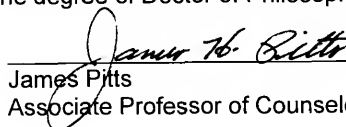
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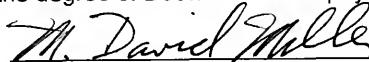
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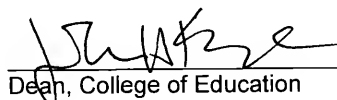
  
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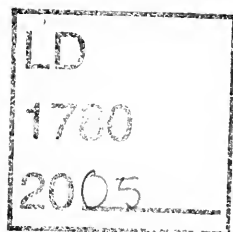
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